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PSYCHOLOGY

VOL. I.

PSYCHOLOGY

THREE VOLUMES

BY

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PREFACE

TO METAPHYSICAL WORKS.

1. It is a singular thing to see that the two words *Philosophy* and *Metaphysics* are not yet used with any constant signification. This is so true that we have recently heard certain French philosophers maintain that such words cannot be defined. If this were so, they ought to be banished from human language.

But, since they are used, it is certain that men attach some meaning to them, although not a constant one. Of this inconstancy it will be useful here to consider the reason.

2. *Philosophy* (φιλοσοφία) is a word invented by the founder of the Italic School. Cicero tells us that Leon, king of the Phliasians, having asked Pythagoras in what art he considered his worth to consist, received from him the reply that he knew no art, but was a philosopher,* and from that time on men given to the study of the most important truths have no longer been called wise men (σοφοί), as before, but lovers and seekers of wisdom (φιλόσοφοι). In these words Pythagoras gave

* *Quæst. Tusc.*, V, iij.

utterance to a most noble moral principle, whose intimate truth was universally felt. For who is the man that can call himself wise? How great is the darkness that surrounds the human intellect! How great is the ignorance that remains to mortal man, even after he has spent his whole life in meditation! How many toils, how many various baffled attempts, in many cases, how many errors have no result but a minute particle of discovered truth! To God alone, therefore, belongs the title of wise: it is a lie and an arrogance to give it to man. Hence Pythagoras, in laying bare this lie, in abasing this arrogance, laid the first solid basis for the investigation of the true, a basis which is none other than philosophical humility. But, if these terms, *philosophy* and *philosopher*, gave a better direction to science and its lovers, they did not therefore determine the matter of their investigations, and hence the meaning of these words, as far as this matter was concerned, remained vague and fluctuating.

3. *Metaphysics* was a word invented by Andronicus of Rhodes, who, when arranging the works of Aristotle, placed the books treating of being after the Physics, for which reason these books received the name of *Metaphysics* (τὰ μετὰ τὰ φυσικά — what follows the Physics). This word, therefore, like *Philosophy*, was not invented to signify any matter about which the mind might concern itself, but merely to mark the position assigned, in the collection of Aristotle's Works, to the ontological books.

4. These facts with reference to the origin of the words *Philosophy* and *Metaphysics* show with sufficient

clearness, that at their first invention they were not meant to mark the determinate subject of any branch of study. Hence, when they came to be employed as names for sciences, every one who used them was free to assign them to different sciences. In this way it came to pass that they received different significations.

5. But now, words that have attained so much currency and celebrity cannot be set aside, and yet no person of good sense can wish to see them any longer wandering about loose and lawless, like vagabonds, whose name and character no one knows anything about.

6. On the other hand, inasmuch as they were not introduced by the common world, but by the philosophic schools, philosophers alone have a right to determine their meaning. The people will be ready enough to receive the law from them, if they will but agree among themselves as to their use

7. Influenced by these considerations, we have tried to fix the meaning of the word *Philosophy* by defining it as "the science of ultimate grounds."* We felt it necessary to determine the meaning of this word, as soon as we contemplated the UNITY of wisdom, of which philosophy is the study and love. It is, indeed, impossible to give the love of the soul to wisdom in its sublime unity, without seeing that, just because it is one, it is susceptible of a single definition, and that without this it can never be written with method and scientific form.

8. But how shall we fix the meaning of the word

* *Philosophical System*, nos. 1-9.

Metaphysics? This meaning must be such that the public, in accepting it, shall not have to depart far from the concepts which it now connects with the word: it must be such a mean between the opposite concepts attached to it, that, when the vague and uncertain use of the word is replaced by a fixed and immutable one, it shall be left with that medium signification, round which all those that have used it, have, so to speak, been circulating.

9. In times past, the word *Metaphysics* was sometimes used as an equivalent for Philosophy itself; at other times, it was used as synonymous with Ontology. Later on, when the word *Ideology* was introduced to signify the theory of ideas, it seemed as if this science was separated from the body of Metaphysics, and, along with it, Logic, which is a kind of corollary or appendix to Ideology. Hence, many text-books for school use have appeared with the title, *Elements of Logic and Metaphysics*, in which the two are contrasted. From this usage we do not wish to depart. And since Ideology (under which we include Logic) is the science of ideal being, *Metaphysics*, relieved of this part which turns toward the idea, will remain a word admirably suited to designate that group of sciences which treat philosophically of the theory of real beings. In this way there will be two very distinct groups of philosophical sciences, that of the ideological sciences, and that of the metaphysical sciences.

10. But with regard to this definition, there are several things to be considered.

In the first place, we must mark the difference between Metaphysics and Physics, which latter also treats of real beings.

Physics is wrongly placed among the philosophical sciences, and it is so placed only on account of the vague meaning attached to the word *Philosophy*. As soon, however, as this word is fixed to mean "the science of ultimate grounds," it excludes Physics, Mathematics, and in general all the sciences called natural, which gather the phenomena and laws of real beings without investigating their ultimate grounds. Besides this, these sciences do not extend beyond corporeal real beings, whereas Metaphysics cannot seek for the ultimate grounds of real beings, as it ought to do, being a part of philosophy, without considering real beings in all their universality, in all their completeness, and, therefore, without rising to those highest principles, those first causes which embrace all real beings. The truth is, the grounds of things are not ultimate unless they are perfectly universal and absolute. Hence, with the unity of philosophy is combined the other most noble characteristic of UNIVERSALITY.*

11. In the second place, the reader must take care not to think that, when we define Metaphysics as the philosophical theory of real and complete being, or as the theory of the ultimate grounds of real being, we mean that Metaphysics has pure reality for its object, because pure reality, separated from the idea, is not an object either of science or of cognition, as we have elsewhere shown.† Indeed, it is not even a being, but only on the way to become a being (μὴ ὄν), containing in itself no ground for itself. The ground of things is always

* See the Prefaces to the two volumes of my *Opuscoli Filosofici* (Milan, 1827-8) and to the *New Essay* (London,

† *New Essay*, vol. ii, nos. 406-409. *Philosophical System*, nos. 1-8.

an idea,* so that real things become objects of knowledge only when they are apprehended and contemplated in relation to the idea, through and in the idea. Bare reality is only perceived by feeling, and cannot be perceived by intelligence: it is not, therefore, by itself, an object of knowledge.†

12. The definitions which we have given of *Philosophy* and *Metaphysics* may to some seem contradictions. It will be said: If, then, philosophy is the science of ultimate grounds, and ultimate grounds are always ideal beings, how can it be affirmed that one part of Philosophy, namely, that called *Metaphysics*, embraces real things?

We reply, that *Metaphysics* does not embrace real things, which are terms of feeling, but the philosophical theory of real things (nos. 9-11).

13. Philosophy is the science of ultimate grounds. For this very reason it must treat of real things, for real

* *Principles of Moral Science*, chap. i, art. i, note.

† Hence, contingent realities, not having the *idea* in their nature, are not cognizable in themselves, as is the case with God, whose essence contains, at once, real being and ideal being.

Here we must observe that we may readily deceive ourselves, by believing that certain sciences dealing with individuals, as astronomy, which deals with the sun, the moon, and the other heavenly bodies, deal with being as purely real and subsistent. In order to see that the theory of these bodies does not stop short at their subsistence, we have only to reflect that, even if God should annihilate all the stars that are in the heavens, that theory would be none the less true. And if God should annihilate the sun and the moon, and create another sun and another moon similar to those annihilated, astronomy would not have suffered a change of any kind. It would be as true, when applied to the newly-created bodies, as it was when applied to the previous ones, from the observation of which man derived it, although the reality of the former is not the same as that of the latter. This proves to demonstration that the material individuality, which man uses as a means and an occasion for arriving at the knowledge of these sciences, is not the object of them; it is but a mere example, in which the mind considers the theory which is valid for all similar cases. That the understanding, even when directed to real things, always terminates its act in ideas, is shown by us more at length in the *Theodicy* (nos. 617-641) and elsewhere.

things must be treated of in a theory of ultimate grounds, for two reasons:

First, because *ground* is a word whose signification is relative to that whose ground is sought, and that whose ground is sought consists in real things. Here we see that real things, as such, do not constitute the proper object of philosophy, but only its occasion and condition. Philosophy treats of them, because it treats of their possibilities and ultimate sufficient grounds.

Second, because the first ground requires a real that is coessential with it, as we have elsewhere shown,* and, hence, it cannot be fully known without the theory of that first reality which constitutes it, not as ground, but as a complete and absolute being, containing the ground of all things. Now, Philosophy must treat of this absolute reality and subsistence, as its own proper object, as the completion of this object.

14. We may now subject to criticism three principal definitions which have been given of *Philosophy*.

Some thinkers can never get away from reality. *Materialists* are necessarily bound to it, so that for them there is in truth no such thing as Philosophy, except a negative one, or, more correctly, the destruction of Philosophy. And here comes in the definition given by Hobbes, who makes Philosophy consist in a "knowledge, acquired by correct reasoning, of effects or phenomena from their conceived causes or generations, and also of possible generations from known effects." Now, since from effects alone, or from phenomena alone, without the aid of the ideal object, we can know only the proximate causes, or, more properly speaking, the laws,

* *New Essay*, vol. iii, nos. 1456-1460.

according to which sensible things change, Philosophy is destroyed by this definition, and there remain only Physics and the natural sciences, usurping the title of Philosophy.

15. The second erroneous definition is that of the *Subjectivists*, who, reducing all ideal objects to mere modifications of the human spirit, define Philosophy as the science of human thought. Such is the definition given by Galluppi.* But human thought is only the instrument wherewith Philosophy finds and contemplates its objects, and these, among which the greatest is God, cannot, in the smallest degree, be reduced to thought. It would be a most manifest absurdity to say that the science of God, which certainly belongs to Philosophy, treats of nothing but human thought.

16. The third erroneous definition, which errs by falling into the opposite excess, is that of the Platonists, who limit the object of Philosophy to ideas, and make the function of Philosophy solely the contemplation of the idea of being,† whereas the truth is, that the idea of being must guide the human mind to discover the absolute and most real being, this being the end of all its speculations—an end which it reaches, not through any idea, but through affirmation and intuition.

To this Platonic definition, that of Wolf may be re-

* *Lessons in Logic and Metaphysics.* In his second *lesson*, Galluppi says: "Since Descartes, philosophers have usually given the title of thought to all the acts, all the modifications, of the human soul, modifications which consist in *feeling*, knowing, desiring, willing." Now, this statement is false, since it would make all philosophers after Descartes sensists and subjectivists. On the contrary, to the honour of Philosophy be it said, there have been some persons who have known how to distinguish *thought* from *feeling*, and the objects of thought from thought itself.

† Plato, in the *Sophist* (p. 254, Edit. Bepont.), speaks of the philosopher as τῇ τοῦ ὄντος ἀεὶ προσκειμενος ἰδέᾳ.

duced. Wolf says that Philosophy is "the science of possibles," and hence, in order to make God become an object of philosophy, he is compelled to maintain that philosophy treats of the intrinsic possibility of God, whereas, of course, it treats of the Divine Being, and not merely of His possibility. Besides, possibilities do not by any means constitute the grounds of things in their completeness, being but a single element of these grounds. Contingent things, for example, do not exist merely because they are possible, but because, being possible, they have been created by a first real cause.

17. Let us now return to Metaphysics. Having fixed the meaning which we intend to give to this word, let us see into what special sciences it is divisible.

The philosophical sciences may be arranged in various ways, according to the points of view from which they are considered, and from which the principle of their classification is derived, and we ourselves have adduced examples of the different ways in which Philosophy may conveniently be divided.*

One of the divisions presented by us was that which distinguishes three groups of philosophical sciences: (1) *Sciences of Intuition*, (2) *Sciences of Perception*, (3) *Sciences of Reasoning*.† Not that any philosophical science is possible without reasoning; but these designations are derived from the acts of the spirit whereby the science receives its object. Some of the philosophical sciences receive their object from simple intuition, others from intellective perception, and others, finally, from reasoning. Now the first, those which require no other act of

* See the Abbé Antonio Fontana's *Manuale per l'Educazione Umana*, vol. iii, chap. viij.

† *Philosophical System*, nos. 108-110, 128, 129.

the spirit but intuition in order to have their object, are the *Ideological Sciences*. It follows, therefore, that Metaphysics belongs to the sciences of perception and reasoning. But does it embrace them all?

18. No, because if Metaphysics is the philosophical theory of real being, it can embrace only the Ontological Sciences, which treat of real being as it is, not the Deontological Sciences, which treat of real being as it ought to be (δεῖ εἶναι). Hence it is not without good reason that the term *Metaphysics* is used by some thinkers as synonymous with *Ontology*.*

19. Nevertheless, the relation between Metaphysics and the Deontological Sciences is a very close one. The theory which demonstrates what being is, is the foundation of that which inquires what being must be in order to be perfect. The crown of Deontology is Ethics, or δικαιοσύνη, or Hosiology, or whatever name we may choose to call it by, because real being is not complete unless it contains the moral form, which is the completer and perfecter of being;† hence, Ethics, the science which shows what moral being must be, is the last word of Deontology, and, therefore, the most highly philosophical among all its branches.

20. From this we may now see more clearly what that group of sciences is which we mark by the term Metaphysics, and from what other groups it separates itself. Our observations, indeed, have shown us that the whole of Philosophy may also be distributed into three

* Baldinotti, *Metaphysica Generalis*, Præf.
† *Theodicy*, nos. 384-394.

groups, (1) *Ideological Sciences*, (2) *Metaphysical Sciences*, (3) *Deontological Sciences*.

In this distribution, the Ideological Sciences are those which receive their object from intuition alone; the Metaphysical Sciences embrace the sciences of perception and the first half of those of reasoning, viz., the Ontological; finally, the group of the Deontological Sciences embraces the other half of the sciences of reasoning.

21. And here we see clearly what position Metaphysics occupies in the vast field of Philosophy, as well as what are its proper divisions. Indeed, we have said that the sciences of perception are *Psychology* and *Cosmology*, and that the first half of the sciences of reasoning embraces *Ontology in the strict sense* and *Natural Theology*. These, therefore, are the four sciences that form the metaphysical group.

22. Although this division seems natural and elegant, we have nevertheless thought it well, in view of our purposes, to depart from it somewhat, and to reduce the last three to a single science, to which we have given the title of *Theosophy*. In doing so, we have tried to aid the understanding of students, to render the argument more compact and magnificent, by sparing their minds, and lightening the labour of abstraction, to which, as we know from experience, many minds are unequal. And it would seem that this great synthesis is not arbitrary, but furnished to us by the nature of the subject.

23. Indeed, if we remember that Cosmology is the theory of the world, it may be treated in either of two ways, that is, physically or metaphysically, and these two

ways have been confounded by many who have hitherto expounded it. And, indeed, the description of the world and its constant laws belongs to the group of the physical sciences and not to that of the philosophical sciences. In order that the theory of the world may belong to the latter, the world must be studied in its ultimate grounds, which may be sought either in itself or in its cause, which is God the Creator. When we consider the world in itself, we see that it is composed of matter, of sensitive souls, and of intelligences. But matter is only the term of the sensitive soul from which it cannot be really separated without being annihilated. In order, therefore, to conceive matter as what it is, we must consider it as united to the soul that feels it, and that is what Psychology does. For, as matter requires a sentient principle to which it shall be term, and without which the concept of it perishes, so the sentient soul requires matter to which it shall be the principle, and without this the concept of it also perishes. Hence the sensitive soul is not a being unless its acts terminate in material or corporeal extension; and for this reason Psychology considers it in this relation. If, on the other hand, we should try entirely to detach matter from the feeling with which it is correlated, what would remain but a pure abstraction, an incipient being without subsistence, or, as the ancients very correctly called it, a *non-being* (μὴ ὄν). This will become manifest in the course of the *Psychology*. The theory of the world, therefore, in so far as it investigates the ultimate ground of the world considered in itself, that is, the ground which constitutes it a conceivable being, proceeds in indivisible union with the science of the soul. On the other hand, in so far as it investigates the ultimate

ground of the world considered in its cause, which is different from the world, it manifestly belongs to the science which treats of God, the sole cause of the created.

24. Leaving, then, to the physical philosopher, to whom it belongs, that part of Cosmology which describes the phenomena offered by matter to the senses and the laws of them, we find that the other part, which seeks for the grounds of the universe, and which alone is truly philosophical, is, on the one side, claimed by Psychology, on the other, by Natural Theology.

25. But what then is to be said of Ontology properly so called? It treats of *being* taken in its aggregate and in its completeness. But about *being* thus considered the human mind may speculate in two ways, by way of abstraction and by way of ideal-negative reasoning. Ideal-negative reasoning leads it to the Supreme Being, to the absolute, most real and most complete being. Abstract reasoning, on the contrary, enables it to find an abstract theory of being, applicable to every being, whether contingent or necessary, because this work of abstraction has for its aim to know the conditions, the qualities, the attributes which are common to all beings, and without which nothing can receive the name or concept of being, whereas every thing receives that name and that concept the less, in proportion as it possesses them in a less degree. Now, this very abstract theory has not, in truth, for its object a real being, and, therefore, cannot constitute any metaphysical science according to the definition given. On the other hand, what is the value of such a theory? What useful purpose has it? Only this, to open a way to the understanding,

whereby it may rise to a knowledge of what the absolute being finally is, that being in which all the conditions of being are fully and completely realized, and to distinguish from it the relative beings which share in those conditions; or, at least, in some of them, but do not possess any of them entirely. In one word, Ontology, so considered, is but a great preface to a treatise on God. For this reason we intend to join it to that treatise, since in this way alone it can receive its fulness and reach its aim.

26. In this way there remain two real beings, known to us according to their condition, as the objects of Metaphysics, and these are the *Finite Spirit* and the *Infinite Spirit*, which supply material for two philosophical sciences, denominated *Pneumatology* and *Natural Theology*.

27. Shall we, then, elaborate *Pneumatology* in all its extent? This word, expressing the science of spirits in general, includes the treatment to all kinds of created spirits, and, therefore, embraces the human soul no less than the separate intelligences. But we shall limit ourselves to dealing with the Soul — to elaborating Psychology, and this for the following reasons:—

28. No spirit save the human spirit comes within natural experience. The philosopher, therefore, cannot treat of angels except through mere reasoning apart from perception. By such reasoning, he may propose to himself three questions: Whether there be separate intelligences; if there are, whence they proceed; and what is their nature? The existence, cause, and cognizable

essence of angels are, therefore, the three parts of Angelology. But their existence cannot be proved except by arguing from their conformity to the attributes of the Creator, that is, of their Cause. Their cognisable essence can be inferred only by analogy from what is known of the soul which alone comes within experience; and, therefore, we cannot speak of the nature of separate intelligences until after we have learnt what experience tells us respecting the human spirit, in other words, until after we have treated of Psychology. We hold, therefore, that the theory of angels cannot, by itself, form a complete philosophical science, and, therefore, we shall deal with it in the theory of the world, of which the angels form a part, when we come to speak of the Supreme Being.

29. Thus the theory of the Supreme Being presents three treatments or parts, very distinct, but intimately connected. The first is a kind of very extensive Introduction, and treats of being in its universality as the human mind conceives it through abstraction; it corresponds to that science which is wont to be called *Ontology;* the second treats of Absolute Being through ideal-negative reasoning, and corresponds to *Natural Theology;* the third is a kind of appendix, which deals with the productions of the Absolute Being, and corresponds to *Cosmology.* To the totality of this theory we give the name of *Theosophy.* But we do not wish even to bind ourselves to keep these three parts rigorously distinct. On the contrary, following the dialectical method more than any other, we purpose to distribute our information in the way that will render it most easy of comprehension to all readers, placing first those

things that throw light on those that follow, without regarding whether they be ontological, theological or cosmological. From this even the science will derive greater unity.

30. Finally, to form the crown and summit of the entire edifice of Metaphysics, we shall add a separate treatise on the perfectly good and wise government of the world, giving it the title of *Theodicy*. This treatise is the link that intimately connects the philosophical sciences with the science of revealed truth, and particularly with *Supernatural Anthropology*.

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INTRODUCTION.

I.

DIVISION OF THE SCIENCES INTO COMPLETE AND INCOMPLETE.

1. The human mind is able to divide that which in its entity is undivided. The reason of this is that it does not with its acts constitute entity, but merely cognizes it. Moreover, it cognizes entity only in that part, and from that side, to which its regard is directed, its *attention* confined. It is, therefore, the laws of attention that break up and limit being, in so far as being is its object: these laws do not for that reason break up being itself. Being, if it should lose its unity, would no longer be. Hence the objects of attention, or *mental entities*, thus limited, are so many portions of the object of a science, but they are not its complete object. The object of a science must, therefore, be an intelligible being [*ens*] in its unity;* and one of

* Beings [*entia*] are objects of the sciences in so far as they are in themselves intelligible; and hence arises the distinction between science and history. *Intelligibility* consists in *universal being*, and for this reason science never considers beings in their blind reality, but always in their essence, whereas history narrates only *reals*, presupposing the existence of the *ideals* in the mind —contents itself with affirming subsistence, supposing essence to be already known. Theology alone considers its object as *real*, because God is real even in His essence, and hence His very reality is *intelligible*. All other realities, being contingent, are not intelligible in themselves, but are so only through universal being, or through the idea, which does not enter as an element into the nature of contingent things, but belongs to the divine nature. What then is the object of the sciences? It is, we repeat, *intelligible being*. Hence, when dealing with contingent beings [*entia*], science has for its object *real species* and *genera* (which are also a kind of species), because they render intelligible beings themselves, and not the mere abstract parts of beings. (See *New Essay*, vol. ii., no. 655.) On the other hand, in dealing with *necessary being*, science has for its object being itself in its essence. It may be said:

the most fertile sources of error is the fact that the sciences are divided according to *mental beings*, without any regard to the unity of beings in themselves. In this way body is given to abstractions, divisions are forced into the nature of things where no division exists, and thus is created an immense number of mere chimeras; for every time that a mental being is taken for a complete being, the mind has created for itself a chimera.

2. We may, therefore, draw a distinction between *complete* and *incomplete sciences*. The former have for their object an entire being considered in its species, and are therefore divided as beings themselves are divided; the latter have for their object special aspects of being, or so many *mental beings*.*

3. To the former class of sciences belongs that great synthesis of knowledge, the need of which so many people feel and so few are able to satisfy. To the latter belongs more properly that analysis which adds so much light to human cognitions by anatomizing them. This analysis may easily become dangerous, because those minds which devote themselves exclusively to it are prone to neglect synthesis, and, when they do this, they rend in pieces the living body of the knowable and deprive it of life, and yet afterwards see with their imaginations in the dead members so many complete bodies, each the object of a science, an object in their judgment complete, but in truth maimed and cadaverous.

4. Of course it is not *analysis* that is to blame for this mischief, but the abuse of analysis. In the same way, it is not synthesis, but the abuse of synthesis, that is to blame for the obscurity, and frequently also for the confusion, of ideas which we meet with in the works of those philosophers

"On this showing, Ideology is not a science." I reply: It is a science, because it treats of the essence of being, and not of a part of this most simple essence. At the same time, it is necessarily elementary, for the reason that the essence of being is not manifested to man naturally otherwise than as the universal medium of cognition.

* *Mental being* must not be confounded with *ideal being*. The former is the work of the mind, in so far as, by its limiting attention, it gives arbitrary boundaries to being; the latter is not the work of the mind, which merely intuites it. In a word, mental beings are ideal beings limited and broken up by the laws of attention.

who, ignorant of the analytic method, or averse to it, talk in a way so concrete and complicated that their language is like a piece of virgin soil, unbroken by spade or ploughshare.*

5. All danger may be avoided in the classification of the sciences, if the *incomplete* sciences are constantly regarded as what they are, that is, as so many members of the *complete* sciences, so that anyone who treats of one of the former shall not pretend that he is developing an entire science, but admit that he is working up merely a part of one, and in so doing shall continually have his eye on the entire body of the science.†

II.

UNITY OF THE SCIENCE OF MAN.—SUBSIDIARY SCIENCES.

6. Man is one, and therefore also the science of man is one; but this man has been broken up by abstraction, and made the subject of many sciences.

If those who have dealt with these sciences had recognized them to be incomplete, and had carefully kept before their eyes the unity of man, no mischief would have come of it, provided some one had come after them to put together the *disjecta membra*, and to set forth clearly the unity of man, by offering the theory of the complete science of him. But I do not see that this has been done, at least by moderns.

7. The physiologists‡ and the psychologists have divided man up in the most ruthless way, each taking a half and believing it to be the whole. Consequently the former have not unfrequently made him a brute; the latter,

* This is the immense defect of German philosophers. French thinkers, on the contrary, abuse analysis.

† The dangers of the abuse of analysis, and the dangers which arise from it, have been repeatedly pointed out by me. See *Anthropology*, Introduction, no. 4, sqq. *Philosophy of Politics*, pp. 53, 60, 97 (cp. xxxiv.).

‡ *Pathology* is properly only a continuation of *physiology*. It is clearly shown that the laws of disease proceed from the universal laws of life. Under different conditions these laws produce two different sets of phenomena, those of health and those of disease.

an angel. We will try to reunite this creature man, thus wretchedly cut in halves.

8. I do not speak of the anatomists. Anatomy is not a science of man at all, not even an incomplete one, since the corpse forms no part of the man. It belongs to an entirely different group of sciences, and cannot aspire to be more than subsidiary to the sciences having man for their object.

9. The history of humanity is not properly a science; it is history. Nevertheless it furnishes the theory of human nature with a number of precious facts. It also, therefore, belongs to the subsidiary sciences of the science of man.

III.

ANTHROPOLOGY.—PSYCHOLOGY.

10. What then will be the most suitable name to give to the science of man?

We have called it *Anthropology*, and the etymology of the term justifies this use of it.

But in this case, of what will Psychology be the science?

According to its etymology, this word means, "science of the soul" (ψυχή). Now the soul is not the whole man, if by man we mean human nature, or if the soul is considered out of its connection with the body. Psychology, therefore, is only one of what we have called the incomplete sciences (nos. 2, 7, 8, 9), and, for this reason, we have elsewhere asserted that psychology forms properly only a part of anthropology, just as the soul forms only a part of man.

On the other hand, if the soul is considered in its connection with the body, and the word *man* is taken to mean the human subject, then it may be said that the soul is the whole man, because it is the subject. It may, moreover, be said in every sense that man is contained in soul united with body, inasmuch as in the feeling of man—and feeling

belongs to the soul—there is included extension* as the term and matter of feeling. For this reason it is impossible to treat of the soul in its completeness without treating of the entire man. What is entirely outside of the soul is entirely outside of the man, and if the body belongs to the man it is only in so far as it is in the soul.† It follows that the distinction between psychology and anthropology does not seem to have any scientific utility. We shall not, therefore, hesitate to assign to the two sciences the same place in the tree of the sciences, considering the two terms as names of one science, and not as names of two sciences.

11. Hence the present treatise, bearing the name of *Psychology*, will be merely a sort of continuation of the *Anthropology* already published. In that work we left many psychological questions unconsidered, our purpose being merely to explain those anthropological or psychological notions which seemed to us to have a bearing on the moral sciences.

IV.

IDEOLOGY AND PSYCHOLOGY. — THESE SCIENCES FURNISH THE RUDIMENTS OF ALL THE KNOWABLE.

12. But what is the relation of psychology to ideology? The first rudiments of all human cognitions are *feeling* and *intuited being*.

What I mean by "first rudiments" is that which in every human cognition is found through attention to be of such a kind that it is not deduced from any previous notion by way of reasoning, but is given directly by nature.

13. Now the rudiments given directly by nature are feeling and the idea.

The *feeling* given by nature is not deduced or deducible

* It is a dictum of S. Thomas that "Illud esse quod est totius compositi est etiam ipsius animæ."—*Sum. Theol.*, Pt. I., quæst. 76, art. 1, *ad* 5.

† *New Essay*, vol. ii., nos. 983-1010.

by means of reasoning from any previous cognition. On the contrary, it is not even cognition, but becomes matter for cognition only when the understanding, turning to it, seizes it by means of its intellective act and makes it its object.

The *idea*—that is, being—in so far as it is the object of mental intuition, is likewise given to man by nature, being incapable of deduction by any reasoning or abstraction, since every act of reasoning or abstraction already presupposes it.

Feeling is subjective in its nature; intuited being is essentially object, and therefore cannot be given to any subject otherwise than as an object. If it could, it would cease to be what it is; it would no longer be intuited being. "To be given to a subject," for example, to the human subject, as an object, means precisely to be intuited. By this intuition intelligence is created, inasmuch as intelligence is nothing but the intuition of being, the union of *object* with *subject*, a union in which the two necessarily remain distinct.* Hence it follows that what is essentially object†—viz., being—is the form of all intelligence; the first cognition; the formal part of cognition.

* Cf. *Anthropology*, Bk. IV., chap. v., nos. 812-831.

† When we say that *ideal being* is *essentially object*, we exclude all those errors into which philosophers have fallen with respect to the starting-point of philosophy. The philosophers who have thus erred may be divided into the following classes:—

1. *Materialists* (extra-subjectivists), who set out with matter, erroneously supposing it to be endowed with thought.

2. *Sensists* (sense-subjectivists), who set out with *sensation*, or feeling, supposing that to feel is to think.

3. *Subjectivists* (intellectual), who set out with consciousness, erroneously supposing that objects known are modifications of the spirit, and that the act of human cognition does not require to be informed by any intellectual light, but produces its own light.

4. *False objectivists*, who in their consequences necessarily fall back into the first three errors. Not being able to cognize the nature of the *object*, they imagine that the object is a *real*, whereas it is and must be an *ideal*. The truth is that what illuminates the mind is necessarily an *idea*, whereas the real is something that requires to be illuminated before it can be known. Now what do we mean by "being known?" We mean being objectified, being contemplated in the *object*. All real things, therefore, are known by means of ideas; without these nothing at all is known. In other words, real things, in order to be known, require two conditions: (1) that they operate in feeling and so render themselves sensible; (2) that, after they are rendered sensible, the intelligent subject apply to them the idea, and thus see them in the idea, or in ideal being; that is, see the relation of (formal) identity, which holds between the sensible real and the ideal object. The real, therefore, so long as it is not known, is not an object; on

It was for this reason that we said that all possible human knowledge sets out from two *postulates:* first, that being be known; second, that there be experience of the feeling which is reasoned about.*

14. Hence it follows also that the sum of human knowledge is divisible into two parts: first, what is given to man by nature; second, what he deduces by reasoning from what is given him by nature.

15. In truth, the reasoning which man employs cannot be applied to that which is altogether outside of him, but only to that which is within him, and there is nothing in him, we repeat, except what comes from reasoning or nature. It follows that reasoning in the last analysis

the contrary, the idea never ceases to be an object of the mind, for the reason that, unless it were contemplated by some mind, it would not exist at all. It is, therefore, essentially object. But if the real (the sensible) is not in itself an object, and is known only in the object (the idea), what is it? In itself it is a subject, if it is a sentient real; an extra-subject, if it is a felt real, such as matter. Hence those who maintain that the primitive object of the mind is a real, are only falsely applying the term *object* to that which is matter or subject. This is why we are justified in calling this class of philosophers *false objectivists.* This is also why I have said that their error coincides with the first three errors. It is one or other of these three, cloaked under the false name of objectivism. The impropriety of speech whereby they arbitrarily attribute the name of object to what is real, does not magically impart to it the nature of an object. On the contrary, the real always remains what it is; that is, either *matter*, or *feeling*, or *intellective act.* To matter belongs, as we have already said, the element of extra-subjectivity. These philosophers, therefore, propound a system which, under the pompous name of objectivism, contains in its womb either materialism or sensism, or subjectivism, according to the development which they purpose to give it.

It may be said: "What about God? Do you know Him by means of ideas?" In this life I know Him by means of ideas and affirmation, just as I know other realities; but the knowledge which we can have of God in this life (apart from the supernatural order) is negative, or, if you will, ideal negative.

In the supernatural order God is perceived supernaturally; but this perception of God differs from all other perceptions in this, that in the perceptions of contingent things, the *reality* is furnished to man by a faculty of feeling different from the *intellect*, whereas in that perception of God which the blessed in heaven enjoy, the reality of God is perceived with the *intellective feeling.* The reason of this is that God's reality lies in His very ideality, and this will not be difficult to comprehend if we bear in mind our principles, according to which we see in ideas the essences of things. The truth is, the essence of God is necessary, and, therefore, never merely possible, but always subsistent. Hence in the idea itself must be perceived the divine subsistence. But before this can happen, God must reveal His essence to the created intellect. Without this no created intellect perceives God.

* *Anthropology*, sec. 10-20. These two postulates are not *arbitrary* but *necessary;* that is, they must in reason be conceded; or, to speak more truly, they are posited and granted to man of themselves. For this reason they do not in the least interfere with the certitude of human knowledge, as we have shown elsewhere.

draws its consequences solely from what is given to man by nature. Now, nothing is given to man by nature save *feeling* and the *intuition of being*. All knowledge, therefore, is but a development of these principles. These are the sole materials out of which the edifice of the knowable is built. Whatever is not contained in these principles cannot be developed from them; they, therefore, contain in germ the whole of human cognitions; they contain them indistinctly; reason only gives them distinctness. When they are rendered distinct, they seem to be created before the eyes of the mind. *Being*, therefore, in so far as it is the object of the mind, and *feeling* are the rudiments of all human cognitions without exception.

16. Now *Ideology* treats of being, the object of the mind; *Psychology* treats of the soul, which is the principle of human feeling. These, therefore, are the two sciences which furnish the rudiments of all the others. All the others, in the last analysis, resolve themselves into these two. If we ask a man, "How do you come to affirm such and such a thing? How do you come to know it?" he may reply: "I affirm it, I know it, because, by reasoning, I have deduced it from this other." If we go on inquiring: "How do you know this other?" he may again reply: "By reasoning from this other," and so on, until he is finally forced back to the first data of nature. In other words, the last thing known to which he will appeal, will necessarily be the being intuited by the mind, and feeling. When he arrives at these ultimates, there is no further deduction possible. To the question, "How do you know being?" or "Whence have you feeling?" he can only reply, "I intuite being and do not deduce it. I feel, and that feeling is not a consequence of any ratiocination, or even of any cognition."

17. This is the reason why we must look to these two rudiments of all knowledge for their own justification, for their warrant of certitude; and if these two data are certain, the other two cognitions, which through ratiocinations are found in them, are also certain, inasmuch as the

principles of ratiocination themselves are contained in the idea. Hence, with the certainty of these two first irremovable foundations of human knowledge we have demonstrated the certainty of all the rest of it; we have likewise demonstrated that no error can occur in these; that with regard to them man is infallible, because they do not depend upon his will, but upon his nature.*

18. "If what you tell me were true, man would be unable to cognize any of the real things which fall under his senses, because real things are not comprehended in the being intuited by the mind, nor, according to our hypothesis, are they contained in feeling——"

I reply by distinguishing the *essence*† of real things from their *reality*. As to their essence, all real things, even those which do not fall under the senses, agree in entity, since if they were not in some manner *entia*, if they had not some entity, they would be nothing—neither things nor real things. Knowing, therefore, by nature what being is, we derive from being some knowledge of the essence of all things, for the reason that the essence of being is, in some degree and in some mode, common to them all. But certainly we cannot know a real thing, that is, we cannot affirm that a thing subsists, if we have not some evidence of its subsistence; let us say, for example, the testimony of some person who has seen or felt that subsisting thing. Now such testimony cannot be communicated to a man otherwise than by means of a feeling; for example, speech, or, if we wish to call in the aid of a miracle, by an internal revelation from God, which, likewise, is reducible to feeling. But leaving aside internal revelation (to which, however, similar reasoning is applicable), and confining ourselves to the example of speech, whereby a person bears witness to us of the existence of a being which does not fall under our senses, we may observe that the sensation of sound which we receive through our organs of hearing is not,

* *New Essay*, vol. iii., nos. 1245, 1246.

† *Essence* is what is cognized in the *idea.—New Essay*, vol. ii., no. 646. *Essence*, therefore, belongs to *being*. Now the term *idea* expresses a *mode of being;* that is, it designates being *in so far as it is intelligible.—Restoration &c.*, Bk. III., chap. 39-51.

indeed, a feeling of the real thing of whose subsistence it informs us; but it is, nevertheless, a feeling which assures us that the person who speaks knows that that thing exists. The knowledge, moreover, which we have of the veracity of that person is a sure proof to us that what he says is true, and hence that the thing whose existence he affirms subsists. Again, the knowledge which we have of this veracity is itself arrived at by means of other feelings; that is, by means of experiences made with our senses, either immediately, or mediately through other signs and evidences. Hence, at last, we must conclude that we may know even the subsistence of a thing which does not fall under our senses, but we cannot know it without having some feeling giving us evidence and proof of its subsistence.

19. "I am not going to ask you how there can be evidences or signs of things, because I know what answer you will give me. You will say that things are connected with each other; that in *being* itself man already understands the *nexus* of things, and that by means of this cognition, which is natural to him, because he derives it from being, he integrates his cognitions, adding to what he knows what he does not yet know, as the necessary condition of it.* I leave out of view this doctrine, which I concede to you—that is, I am willing to grant that you have explained the way in which a man may use a known thing or a sensation as a sign to lead him to another thing or sensation. I do this all the more willingly that, even if I did not understand the explanation which you offer, I should not be able to deny the fact—viz., that man does really employ signs and indications, and arrives by means of them at a knowledge of the subsistence of entities which his senses do not reveal to him. But I have another objection to raise against your doctrine. I say that a sign, a sensible evidence, informs you that a being subsists, but it does not tell you what that being is. Nevertheless, there are even beings which have never

* *New Essay*, vol. ii., nos. 558-629; vol. iii., nos. 1044-1064.

fallen under my senses, in respect to which I know what they are, and sometimes I even know them as well as things which I myself have seen and heard, or even better. For example, I have never been at Constantinople, and yet I have heard and read so much about it that I know it better than I know Rome, which has fallen under my senses, although merely *en passant*. Hence, over and above the senses, there must be some other way of knowing the objects of human cognitions, and it is not true that these are reducible to the two rudiments which you have laid down, the *sensible* and *being* known to man by nature."

In order to obviate this difficulty, I distinguished from the beginning between knowing the *essence of a thing* and knowing its *subsistence* or reality. Now you agree that, in order to know subsistence (unless I know it by nature, or can induce it from something which I know by nature), I require a feeling, or at least a sensible sign to indicate it to me, and that this sensible sign is given by nature and not by reasoning. Your difficulty, therefore, touches the cognition of the essence of things. You must distinguish, therefore, between things the like of which have fallen under our senses—as, for instance, the city of Constantinople, the example you cite—and things that have never fallen under any sense, internal or external; as, for example, colours to a blind man. In the case of things the like of which have fallen under our senses, we know their essence by applying to them the cognition of things already perceived; and, therefore, we recur to the feeling given to us by nature. Thus it happens that, having seen other cities and all that belongs to a city, whenever you hear of a city which you have not seen, you, with your imagination, employ the knowledge which you have of other cities to clothe the subsistence of the one you have not seen, and thus, guided by the accounts of travellers, you construct, let us say, Constantinople, by means of the forms of those cities which you have perceived with your senses, or, with your imagination, conceived after their model. Is it not,

therefore, from feeling that you obtain, in this case, your materials for your knowledge of Constantinople?

On the other hand, with regard to things whose forms have never fallen within our feeling, as is the case with colours to a man born blind, I reply as before: "You can have no other knowledge of the *essence* of things whose subsistence is attested to you than that which you derive, with your thought, from the common entity known to you by nature, and from the subsistence indicated to you by testimony and the relations between subsistence, entity, and the other beings known by means of feeling, whether these relations are given you in the testimony or obtained by means of reflection. This is all the knowledge that is possible for you.

20. But observe: this knowledge is not by any means so poor as, at first sight, it might seem. The testimony furnished you respecting the thing in question enables you to know (1) its subsistence, (2) its determination, limitation, and other ontological relations with being and other known things—for instance, the relation of cause; (3) what it is not.

21. Thus, when we, with our understandings, refer the various real things perceived by us to the being intuited by the mind, we readily come to know:

(1) That some similar properties must necessarily belong to those beings which do not fall under our feeling, and whose subsistence we know only by testimony. This necessity is made known to us through our natural knowledge of *being*, for the reason that, when we know what being means, we know at once that the things indicated to us could not be, would not be, beings, if they had not these properties. And these properties, common to the beings known to us through feeling and to those indicated to us by testimony, constitute the basis of *analogy*. Hence we know things not perceived by us through the *analogy* which they bear to those which we have perceived.

(2) That some properties occurring in the things per-

ceived by us through feeling must be absolutely excluded from the things not perceived by us. And this adds a kind of negative knowledge by exclusion.

If to these two ways we add the other two, that of subsistence through testimony, and that of ontological relations indicated to us or deduced by us, we may conclude that we construct the cognizable essence of things which do not fall under our feeling, or of which the like have not fallen under it.

(*a*) By the *sensible testimony* of other people, who indicate to us the subsistence of these things, or even, perhaps, certain ontological relations to things known to us through feeling—certain analogies, certain negations.

(*b*) By *ontological relations*, discovered by ourselves, through reflection, to said things.

(*c*) By *analogies*, discovered by us, with the same things.

(*d*) By *exclusion*, also discovered by us through reflection.

22. Let us take the example of the cognition which our feeling does not reach—the knowledge which we may have of God through reason.

We know the subsistence of God through His ontological relations with that which we know through feeling—that is, the world. We do so by observing that the world must have a cause, because it is, but would not be, if it had not a cause. This we know through the *being* known to us by nature, to which we refer the world given to us in feeling.*

Other *ontological relations* of the cause of the world are *infinity*, *necessity*, *simplicity*, etc. The cause of the world subsists, but it could not subsist without these its determinations; therefore it has these. That it could not subsist without such determinations—that is, that it could not be a *being*—we know from the simple fact that we know what being is, and, therefore, what it requires in order to be a being, and such or such a being.

What is the concept of an infinite being? Such a

* *New Essay*, vol. iii., nos. 1264-1273.

being will certainly be one which has all the grades of being, and hence will be one that is not dead, but which has feeling and intelligence in the highest degree. But how do we know the essence of feeling or of intelligence? We know it from the experience of what takes place in ourselves, from our own *feeling*. How, then, can we know the feeling and the intelligence of God? Only through *analogy* between what must be in Him and the feeling and intelligence which are in ourselves.

Moreover, through analogy between the Supreme Being and all other beings compared with the being known to us by nature, we are able to infer that He cannot be wanting in *reality*, *ideality*, or *morality*.

But the concept of infinite and absolute being, made clear by means of said analogies, when referred to the idea of being which we have by nature, transforms itself into being itself, subsisting indivisible in the three forms. Knowing being as we do, we understand that there would not be any absolute being were it not being itself in its three forms; and this seems to me the highest conception that human intelligence can form of God apart from revelation. We see, therefore, how all natural theology at last reduces itself to *being* known to us by nature and to feeling, as its first rudiments.

23. Ideology, of which logic is a continuation, treats of being known by nature; Psychology treats of feeling. All the other sciences, therefore, owe their materials to these two fundamental ones; to these two they must reduce all that they offer as positive knowledge—that is, knowledge of real things; to these they must look for their origin, and, in their origin, their certitude also. Their doctrines are certain if, by a sort of mathematical equation, they are reducible to other doctrines certain in themselves, without the need of reasoned demonstration.

V.

PSYCHOLOGY.—COSMOLOGY.

24. There remains another difficulty. Is not the science of the world itself an offspring of perception and observation? Does not it, too, furnish primary data, and therefore, certain rudiments of the knowable?

The science of the world, or cosmology, is unquestionably a science of perception and observation, and if by *world* be meant all that is created, psychology itself becomes a material part of cosmology, since, after all, man is a member of the world. But it is one thing to consider sciences from the point of view of their subject-matter, another to regard the fountain from which they spring. If cosmology be considered with reference to the source from which man draws it, it is readily seen to arise out of psychology, for the very reason that it is a science of perception and observation.

And, indeed, that which perceives the external things which compose the world and man is the soul.

In the feeling of the soul there is a duality; there is a subjective element, and there is an extra-subjective element, which, through reflection, change respectively into *ego* and *non-ego*. In all perceptions of corporeal things we distinguish these two elements. We feel and perceive them together, the one as the opposite and limit of the other.

Hence it is the soul's feeling that enables us to know the corporeal part of the universe. This universe is perceived only in so far as it falls within feeling, as something heterogeneous; and it is for this reason—we repeat—that the body is in the soul, and not the soul in the body.

25. Now, if the world is perceived just in so far as it is received in feeling, it follows that the knowledge which we have of it, although certain, is partly phenomenal and partly absolute; in other words, the corporeal world, as presented to us in perception, is composed of elements

which we ourselves posit and of elements which are given to us; and to distinguish the one set from the other is the work of reason, by which alone we discover what is the part that is extra-subjective and independent of us. Such is the positive cognition that we can have of the essences of things.*

26. But the world does not consist merely of bodies; it contains also spirits. Still, even for these we must have recourse to psychology, for the reason that man can arrive at no positive knowledge respecting other spirits except by setting out with the feeling which he has of himself, the truth being that the spirit is feeling. Man, therefore, sets out with the feeling of himself, and, by means of this positive cognition, he conceives other feelings, other spirits, constructing them variously through reason alone.

Thus psychology furnishes the first rudiments even to cosmology. Cosmology, indeed, is conceived in the womb of psychology, just as the known world exists in the bosom of the soul.†

VI.

ON THE METHOD TO BE PURSUED IN PSYCHOLOGICAL RESEARCH.

27. Since we now know that Psychology is the science which furnishes all the others with the *real rudiment* of human knowledge, and Ideology that which furnishes the *ideal rudiment*; we may go on and discover by deduction the proper methods of these primitive sciences.

28. This method must plainly be one of observation. The facts must be clearly presented, their parts distinguished, comparisons instituted between them, and finally, conclusions drawn from them. In all this the eye of the mind must keep itself continually fixed on the naked fact in order to see it clearly, and without allowing the imagination, during the process of observation, to add,

* *New Essay*, vol. iii., nos. 1209-1212.
† Preface to *Metaphysical Works*, no. 28.

obscure, or subtract anything. In this way it will afterwards be able to bear testimony with the utmost fidelity, precision and sagacity, and to produce a description corresponding in every respect to the truth of the thing.

But what are we to say to the division which Christian Wolf made of psychology into two sciences, the one denominated *Empirical Psychology*, the other *Rational Psychology;* the one proceeding by means of observation, the other by means of reasoning?

VII.

THE DIVISION OF PSYCHOLOGY INTO TWO SCIENCES, EMPIRICAL PSYCHOLOGY AND RATIONAL PSYCHOLOGY, INTRODUCED BY CHRISTIAN WOLF, MUST BE SET ASIDE.

29. This Wolfian division, though embraced with striking unanimity by the whole of Germany, and religiously followed by the philosophers of that nation, seems to us not only to be arbitrary, but also to be suggested by certain erroneous opinions with regard especially to the nature of *observation* and *reasoning*.

30. In fact, it was believed that *observation* could be completely separated from *reasoning*, as if the former were a way of knowing altogether distinct, and the latter another way of knowing which had no need of the former.

Moreover, to these two modes of knowing, supposed to be separate and independent, there were attributed different degrees of certitude, and in general it was pretended that observation offered full and undeniable certitude, whereas reasoning did not. Hence Wolf himself informs us that he has separated *Empirical* from *Rational Psychology*, in order to establish upon the former, which contains doctrines demonstrated by experience, and, therefore, not contested, the truths of morals and politics.*

* "Philosophia practica est maximi momenti: quae igitur maximi sunt momenti, istiusmodi principiis superstruere noluimus, quae in disceptationem vocantur. Ea de causa veritates philosophiae practicae non superstruimus nisi principiis, quae per experientiam in Psychologia Empirica evidenter stabiliuntur." — *Discursus prælim. de Philosophia in Genere*, no. 112. We should like to ask whether it is possible to find a firm basis for ethics with-

31. These errors are both sensistic; and the fact that they have so long maintained themselves in German philosophy proves that the vice of this philosophy, which outwardly is so speculative, so abstract, or rather, so mysterious, lies in the concealed sensism which it contains, and which eats out its vitals.*

In fact, none other than sensists could believe that there was a kind of observation capable of imparting to us any truth by way of sensation without the use of reason, or that the truths derived from observation of such a kind were alone certain and beyond controversy.

32. But the fact is, there is neither observation nor experience of any sort that has not mixed up with it the operation of reason, although it is sometimes difficult to discern its presence. Even Condillac himself observed that among our sensations there insinuate themselves unobserved judgments (and this is the best thing he ever said), and from him down to Lord Brougham, in his recent little work on Natural Theology,† all philosophers have come more and more to be aware of the multitude of those judgments and reasonings which, insinuating themselves among our sensations, furnish us with the knowledge of many truths which we subsequently attribute to sensation alone. Indeed, if they had continued advancing in this way until they had observed and carefully noted all those swift and furtive judgments which accompany feelings,

out supposing the soul to be simple and immortal; or, at least, while supposing it to be material and mortal? We believe that to suppose the soul mortal makes the demonstration of moral obligation altogether impossible. And even granting that moral obligation could be established before a knowledge of the soul's immortality was arrived at, provided it were not denied, we believe it to be evident that morality itself leads to a conviction of the soul's immortality (indeed, this is the way it was demonstrated from Plato down to Kant), and that by means of this conviction ethics are elucidated and developed. If, therefore, ethics can begin without taking into account the immortality of the soul, it certainly cannot develope and complete itself without the aid of this truth. Now, where does Wolf demonstrate the simplicity and immortality of the soul? In the *rational psychology*, not in the *empirical*. It is, therefore, upon the former, as much as, and more than, upon the latter, that ethics ought to be based; and thus the reason which he adduces in justification of his division of psychology into *empirical* and *rational* falls to the ground.

* *Theodicy*, nos. 144-147.

† *A Discourse of Natural Theology, showing the Nature of the Evidence and the Advantages of the Study*. Brussels, 1835.

sensism would have fallen to the ground of its own accord. This is precisely what we have been trying to do, and the result of our researches has been the certainty that there is no such thing as a purely sensible observation; or, in other words, that if observation is stripped of every act of understanding which accompanies it, it imparts no knowledge whatsoever—that it is a fact which terminates in itself, and of which we have not even consciousness. The truth is, the very consciousness of sensation requires the turning of our intellective attention to what is going on in our feeling, and a consequent affirmation, by which we say to ourselves: "Now we feel such a passion, such a feeling," which is a judgment. But this judgment is so spontaneous, and follows so closely upon feeling, that it escapes our notice. We do not trouble ourselves to know it, but merely to know, by means of it, the feeling of which we have thus come to be conscious. It is this judgment, closely united to feeling, that constitutes the *intellective perception* of sensation; in other words, consciousness.* Now what is it that justifies this internal word which we say to ourselves on the occasion of sensations: "We suffer so or so?" What furnishes the certainty of it? It is certain that the *persuasion* of the certainty of this affirmation is natural to us, and most men require no farther proof to remove all doubts with regard to it; but when we ask for a demonstration of the fact that this persuasion does not deceive us, then we must analyse it and see how it is formed, and on what it rests. This analysis leads us to the being which we intuite by nature, and in it all reasoning becomes evident. In truth, as soon as it is certain that in cognition we possess being, or, in other words, that "we know that what we affirm is," then we can no longer doubt "if that which we affirm is." Hence what we affirm is true, insomuch as to be true means nothing but this: That what we affirm is.†

* The *intellective perception of sensation* is not the first perception. It is preceded in the logical order, and accompanied in the chronological order, by the *intellective perception of the real being* to which the sensible quality belongs, as we have shown in the *New Essay*.

† *New Essay*, vol. iii., nos. 1062-1064.

33. From these considerations we are enabled to conclude that the certitude and the proof of our sensible observations lie solely in the force of that secret reasoning which we always go through in connection with them. Hence, in all the sciences equally we are bound to have recourse to the authority of reason, or of the idea of being, the ultimate seat of evidence; and this no less in order to make certain the truths of observation than to assure ourselves of those of induction and deduction. Reasoning is, therefore, in every case the organ with which we construct the sciences, and it can never in the smallest degree be set aside. For this reason it is impossible to assign any specific difference of method between empirical and rational psychology. The difference is solely one of degree, and is due to the fact that what is demonstrated in the former is the fruit of a shorter reasoning, whereas that which is demonstrated in the latter is the fruit of the same reasoning continued to the point where new truths are deduced from the preceding ones. But this difference of degree does not give occasion to two sciences any more than does the division of Euclid's Geometry into different books. These books are not so many sciences, but merely so many steps in the same science.

VIII.

ON THE SYNTHESIS INHERENT IN THE METHOD AND DISTRIBUTION OF THE PHILOSOPHICAL SCIENCES.

34. But from this truth, that reason is always the organ with which we construct the sciences, whether they be sciences of observation or of induction,* we will

* It will, perhaps, be objected that the intuition of being is a cognition requiring no reasoning. This is true, but the intuition of being does not by itself constitute a science. Every science, in fact, is a deposition of our consciousness, so that the intuition of being does not even enter the domain of science save on condition that we perform an intellective act, in which we say to ourselves that we have the intuition of being. But this we cannot say to ourselves unless we reflect upon what is in our minds, and saying this is already pronouncing a judgment. Again, we cannot *prove* the certitude of this judgment save by means of another reflection on it, in which we go through

here draw an important consequence tending to make clear the method which must be followed in the exposition and distribution of the philosophical sciences.

Simple *feeling* is not *observation.* Observation implies an act of the mind which makes an object of a feeling and resolves itself into a judgment. This act of the mind—judgment, or ratiocination—is, in the last analysis, only the application of ideal being to the feeling to which it turns its attention. Every reasoning, therefore, necessarily includes two elements—(1) ideal being, (2) the feeling to which this being is applied. The knowledge, therefore, which we have through reasoning of the one of these things cannot be had without a knowledge of the other. The two cognitions posit themselves in us at the same time. This is what we call *synthesis.*

35. And, indeed, those cognitions which we endeavour to attain by means of reason (and through it alone consciousness is awaked in us and the sciences constructed) can at first have only three objects: (1) our own corporeal feelings or their corporeal terms; (2) ourselves—that is, our internal feelings; (3) the idea of being. If the first two are the objects of reasoning, it is clear that it is composed of feelings and of the idea of being at the same time, because the former could not be objects of thought without the latter. If, on the other hand, we suppose the object of reasoning to be the idea of being alone, then the supposition is either taken rigorously and is absurd, or else it is not taken rigorously, and then there enters into it a feeling to render the reasoning possible. I say it is absurd to suppose a reasoning with the idea of being alone, without any sensible element. The truth is, the man who affirms something of it, either predicates something of being itself or predicates something of the intuition which he has of it; for example, affirms that he has the

a piece of reasoning in this form: "We intuite being. But being is that which is. Therefore we intuite that which is. But that which is is the truth. Hence the intuition of being cannot deceive us; the being which we intuite cannot be an appearance because this appearance would be the truth, which is a contradiction." We, therefore, require reasoning in order to render intuition itself the object of a science.

intuition. If he predicates something with regard to the intuition of it, the feeling of himself becomes an element in his judgment or in his reasoning. He cannot, therefore, say: "I have the intuition of being," without first knowing that *ego* which he names, and which is a substantial feeling, or complex of feelings, elaborated, we might say, by the understanding itself. If, on the other hand, he refers, not to the *intuition*, but to the *being* intuited by him, then there is nothing left for him to say about it, except on condition that he compare it with subsisting things, and from this comparison draw the conclusion that these are different from it. He will then perhaps invent the word *ideal* to mark this difference. But all this pre-supposes a knowledge of feelings. Indeed, he cannot say that intuited being is ideal until he has made the comparison in question, because the word *ideal* has no other meaning than this, that it excludes the reality of substances or efficient causes. He cannot even go so far as to say to himself: "Being is," because this is not an interior affirmation. It is merely a phrase which signifies nothing at all, inasmuch as the supposed predicate adds nothing to being. Language may, indeed, in this way construct judgments in which there is an apparent predicate; but the mind cannot do so. Thus there is *synthesis* inherent in all reasoning.

36. Hence we are able to conclude that the two elements of reasoning which enter into synthesis—that is, hold themselves inseparably together—cannot properly and entirely constitute two distinct sciences. The two must be constructed at the same time, must mutually elucidate each other and be understood by one and the same act of the spirit.

37. The sciences which treat of the two primitive elements of reasoning are, as we have said, *Ideology* and *Psychology*. Each of these, therefore, requires to be supplemented by the other. The theory of the idea, being a doctrine of reflection and reasoning, cannot be understood without the theory of the soul which is informed by the idea; and, in like manner, the theory of the soul is

unknown so long as it is not lighted up by the theory of the idea. Hence, in the *Idcology*, we assumed many things belonging to psychology, and so likewise in the *Psychology* we shall be obliged continually to make use of ideological notions.

38. But here many doubts and questions will arise. If neither of the two things can be understood without the other, which of them will you speak of first? Can two things be spoken of at the same time? Since the truth of both has to be proved, with which are you going to begin? How will you be able to prove the truth of one of them, when the truth of the other, which is necessarily introduced into your reasoning, is not yet proved?

I do not pretend to deny the importance of these questions, or the difficulty of giving an adequate reply to them; but the reader is already aware that I regard as a step forward in science every question that is propounded; for, if it is grave and apparently insoluble, it always contains some precious secret. And this seems to me to be the case with the questions just asked. I reply, therefore, that there certainly are things of which the one cannot be understood without the other, as is the case with all relative concepts, for instance, those of cause and effect, and which, therefore, have to be understood at one and the same time, with a single act of the understanding. But when we try to express these things in words, then, in consequence of the imperfection of the words we use, they seem to fall asunder and separate. Nevertheless, the understanding makes up naturally for the deficiency of the words, conceiving in its entirety the thing which the words hardly began to express. Thus, if the word *effect*, or the word *cause*, is pronounced alone, the understanding comprehends at once what is expressed, although neither the effect can be conceived without the cause, nor the cause without the effect; but the name of one of these concepts is sufficient to direct the attention to both (although not in the same degree); the two being bound together by nature are for the mind a single thing, a single relation.

39. With regard to the certitude of correlative doctrines and the manner of demonstrating them, we must lay down the principle that "certitude comes from the same source as knowledge," since *to know* and *to know the truth* are the same thing. He who does not know the truth does not know at all.*

40. From what has been said it follows that, in the case of correlative doctrines, which, as forming in the mind a single complex concept, have to be known simultaneously with one act of the understanding, the one cannot be proved or rendered certain before the other, but the two receive their certitude at once from the light of truth which is common to them.

41. This reply extends to both correlative concepts and correlative doctrines. But the case is somewhat different when the synthesis takes place, not between two concepts or two cognitions, but between the form and the matter of the same cognition; and this is true with regard to intellective perception, in which a *feeling* unites itself with the *being* intuited by the mind, and a single judgment is pronounced, which takes the form: "A being subsists." In this perception being is known to the mind first. It is a cognition by itself—essential cognition—and has no need of any feeling to render it such. Feeling, on the other hand—or, more properly, the real being characterised by feeling—makes itself known to us by means of being. It is from being that we derive the knowledge, certitude, and proof of it. The demonstration may be conducted in this fashion: Consciousness attests to us that there is a feeling. But might not consciousness deceive us? Let us see. What is the meaning of "Consciousness attests to us that there is a feeling"? It means that we know, or affirm, that there is a feeling. To what does this affirmation, There IS a feeling, reduce itself? To the affirmation

* *Restoration, &c.*, Bk. I., chap. 10 sqq. Be it observed that even in error there is always mixed up a certain amount of truth. For this reason it appears that even the man who errs knows. And, indeed, he does so; but not in so far as he errs. If he had no truth in his mind he could not even err. In fact, without truth there is no intellective act right or wrong, none conducting either to truth or falsehood.

of the identity between the being and the feeling. To say this is merely to say that the feeling is not nothing, since the opposite of being is nothing. Now, if to the words *nothing* and *feeling* we attach two concepts, these are contraries; whereas, if to the words *being* and *feeling* we attach two concepts, these are, *ipso facto*, identical (except that the first contains more than the second, and therefore is limited, and so identified, by the affirmation). If we attach no concepts to the words, there is no thought. If there is no thought, no error even is possible. Hence it is not possible that the proposition: "Between feeling and being there is identity;" or its equivalent: "There is a feeling," should be erroneous.

This demonstration is entirely based upon the notion of *being*. The soul, intuiting being, sees that all identifies itself with it; and this all, identified with being, acquires the truth and certitude of being itself.

42. The truth, the certitude, the evidence of the testimony of consciousness are due to the *being* which informs it. Without being there would be no consciousness, as there would be no intellective act. And as the spirit beholds being, so it beholds, with the same glance, the identity of real things with being, and when this vision is reflected and falls upon anything united to us, it is called consciousness.*

43. But here we must fix our attention. The intuition of being is the fact furnished by nature, the fact of cognition. The fact of cognition requires no demonstration, for demonstration means "reduction of what is believed to be known to the fact of cognition." When this is done we no longer believe that we know, but we know. Nevertheless, the man who has not yet meditated upon himself is not aware that this is the case, and it is Ideology and Logic that prove to him that all demonstration is reducible to this. But Ideology, with its continuation, Logic, cannot be expounded without the introduction of perceptions—tes-

* See the definition of consciousness (conscience) as applied to moral questions in the *Treatise on the Conscience*, nos. 9-17.

timonies of consciousness. Do we not, therefore, fall into a vicious circle? By no means. In those sciences we do nothing more than direct the attention of the mind to *observe* perceptions, &c.; and we require no previously demonstrated truth in order to direct the attention; all that is necessary being some stimulus capable of producing such an effect. This stimulus may be entirely blind; it may even be an error. For example, a man, by means of a lie, induces me to look at some object. I see the object just as well as if I had been induced to look at it by a truth. When once we have succeeded in making the mind observe perceptions, without going beyond mere observation, these become certain to us, because they are only "the identity manifested to man between feeling and being." In this way perception is identified with the fact of knowing; hence it is not a belief that we know, but knowing itself.

44. In spite, therefore, of the synthesis which exists between ideological and psychological doctrines, both are furnished with certainty, and receive the most rigorous demonstration without falling into any vicious circle.

IX.

DIVISIONS OF PSYCHOLOGY.

45. Coming now to speak of psychology we must ask: Where shall it begin? and, What is its sphere?

We have already observed that the attention of our understanding is made to fix itself upon the soul by the new and particular feelings which arise in it in the passage from non-feeling to feeling; that is, from not having a given accidental sensation to having the same. These changes, which happen in it, and which arouse its attention and reflect it back upon itself, produce the consciousness which reveals to the philosopher the doctrines with reference to the soul. Consciousness, therefore, is the immediate source of psychology.

46. But the philosopher is not content with the first depositions of consciousness, whereby he learns what takes place in himself. He desires to go on and connect the feelings and operations of the soul, and to rise from them to a knowledge of the soul itself, which is the subject and, in great measure, the cause of these, to a concept which shall give him its cognizable essence, and enable him to distinguish its nature. When the philosopher has got so far as to be able to determine the essence of the thing of which he is treating, then he has found its last intrinsic ground, and has discovered the principle of all the reasonings which can be carried on with respect to it. And philosophy means nothing more or less than this, to find the ultimate ground of the genus in question, the principle of the whole theory, and to arrange by means of it the doctrines which spring from, and are determined by, that principle.

47. When the mind has risen to the essence of the thing, it descends from this along the operations which proceed from it. Hence, when it knows the essence of the soul, and thereby its substance, the thought of the philosopher can accompany it in its development and mark the laws which the substance follows in its operations and development.

48. Finally, when it marks, among the modifications which the soul undergoes as the result of its actions and passions, those which improve it or those which degrade it, then the mind is led by the study of these to see by what steps the soul descends to perdition, the depths of corruption, or ascends to the height of perfection for which it was made. In this way, philosophic meditation, following the soul in its progress to the extreme of good and the extreme of evil, comes at last to form the *ideal* of the soul, to contemplate it as having attained all its possible perfection, or, at least, to answer the question whether the perfection of the human soul can have a limit.*

* I am wont to call the *complete species* the *archetype* (*New Essay*, vol. ii., nos. 648-652). I also give the name of *ideal* to the highest state of per-

49. From these considerations we may conclude that all the doctrines which go to make up Psychology may properly be arranged in three classes, the first treating of the nature of the soul, the second of its development, and the third of its destiny. In other words, Psychology as a whole treats of the *beginning* (principle, ἀρχή), the *middle*, and the *end* of human activity, and of humanity itself. But, to tell the truth, the destinies of the soul transcend all the limits of nature, and hence we must deal with them in the *Supernatural Anthropology*. The present work, therefore, will confine itself to the first two classes of doctrines, those relating to the nature of the soul and those relating to its development.

fection which an individual, by its own operations, can reach. The archetype, therefore, is the perfection of a thing in its *nature*; the ideal is the perfection of a thing produced by its own operations.

PSYCHOLOGY.

DEFINITIONS.

50. To the definitions prefixed to the three books of the *Anthropology*, and supposed to be known to the reader, we must add the following, which, it is hoped, will contribute towards the understanding of these books of Psychology which form a sequel to that work.

I.

Psychology (ψυχολογία) is the science of the human soul.

II.

Soul is the principle of a substantial-active feeling, having for its term space and a body.

III.

51. *Body* is a force diffused in extension or space.

IV.

Force is that which produces a passion in feeling or in its extended term.

Observation.—It may appear to some that in thus defining force, we fail to recognize that effect of corporeal force by which brute bodies, acting reciprocally, modify each other. But this difficulty will vanish if the reader

will carefully bear in mind what we have elsewhere written with regard to this subject.

V.

52. *1st: Substance* is that first act of a being by which it is constituted, and by which also it is conceived, without the mind's requiring any other entity to place it in.†

Corollary.—Hence, in the common definition of substance as "that which exists *per se*," *per se* must be understood not to be taken universally but restrictively; that is, in relation to the entity which it does not require in order to be conceived.

2nd: Substance is the act whereby essence‡ subsists, whether this act be considered realized or merely realizable.

Corollary.—Hence there are two modes of substances, as there are two modes of substantial essences. Some essences present a single indivisible entity; others present several entities conjoined in one, one of them, however, taking precedence of the rest and constituting the subject. If the subordinate entity is separated from the principal one, it loses its identity, and then it is called another substance, or, more correctly, another *substantial form;* for example, the human soul is an essence made up of the supreme intellective principle and the sensitive animal principle, the intellective principle being the principal entity, and the one which constitutes the subject. Now this sensitive principle in man is an entity which may be separated, and may exist apart, as we find in the lower animals. But the sensitive principle in man is not identical with the sensitive principle in the lower animals; because, whereas in the latter it may be considered as a substance, in the former it receives another *substantial form* from its union with the intellective principle, and hence is not the same substance as before, but part of another substance.

* *New Essay*, vol. ii., nos. 834-836. † *New Essay*, vol. ii., nos. 598-600.
‡ *New Essay*, vol. ii., nos. 657-659.

VI.

Accident is an entity which cannot be conceived except in another entity, whereby it exists and to which it belongs.

Observation.—Although an accident may, by way of abstraction, be conceived apart from substance; yet the mind cannot do so unless it has first conceived it united to its substance.* When considering it abstractly, the mind itself is compelled either to preserve the notion of the substance to which the accident is joined, or else to suppose a substance in general in which it inheres.

Corollary.—Hence the force whereby alone a body is conceived enables us to know that body as a substance.

VII.

53. The *human soul* is the principle of a substantial active feeling which, remaining self-identical, has for its terms extension and, in it, a body and being; and hence is at once sensitive and intellective *(rational)*.

VIII.

Intuition is the receptive act of the soul, by which it receives the communication of intelligible or ideal *being*.

Observation I.—This act is called *intelligence* (νόησις) by Aristotle, who says that "intelligence is of indivisibles,"† meaning by indivisibles the essences of things which are seen in ideas. Hence, with the schoolmen, *cognitio simplicis intelligentiæ* is equivalent to "knowledge of possibles."

Observation II.—Hence Kant perverted the language of philosophy when he employed the word *intuition* to mean *sense-perception;* and in this alteration of the meaning of the word he showed the sensism which lies at the basis of his

* *New Essay*, vol. ii., nos. 612, 613. *Restoration &c.*, Bk. III., chap. 17, f. 315.

† [Τῶν ἀδιαιρέτων νόησις], *De Anima*, iii, 6, 1; 430 *a* 26. [Aristotle merely says: "The intelligence of indivisibles is among those things with respect to which there is no deception."—*Tr.*]

system, attributing to the sense the act which is peculiar to the intellect.

IX.

Sensitive perception is the act of feeling which receives into itself an extra-subjective force capable of modifying it.

X.

Intellective perception is the act by which the rational soul affirms (habitually or actually) a felt reality. The corresponding faculty we shall call *percipience.*

Observation.—Hence St. Thomas gave a most excellent definition of this word, when he said, "Perceptio experimentalem quandam notitiam significat." — (*Sum. Theol.*, Pt. I., quæst. xliii., art. 5 *ad* 2.)

XI.

54. *Reality of being* is being in so far as it is feeling, or has the force to produce or modify feeling.

Corollary.—Perception, therefore, is a communication between two realities, the one of which is sentient and the other sensiferous.

XII.

Subsistence is the act proper to real being, or the act whereby a being is real.

Observation.—This definition and the preceding ones mark the significations of the words, not as arbitrarily defined by us, but as settled by the constant usage of centuries. We have merely sifted out the *improprieties* into which, not the multitude of speakers and writers, but individuals who speak or write, have fallen and fall. Thus the whole of antiquity formulated the question of universals in this manner, in which it is also repeated by Porphyry in his Introduction to the *Categories* of Aristotle, *Utrum universalia subsistant an in nudis intellectualibus posita sint*

(περὶ γενῶν τε καὶ εἰδῶν τὸ μὲν εἴτε ὐφέστηκεν εἴτε καὶ ἐν μόναις ψιλαῖς ἐπινοίαις κεῖται, cp. 1), where *subsistere* is manifestly taken to mean the act whereby a being is *real*, in contradistinction to the act whereby it is merely *ideal*; for ideal being is not zero, as materialists (and they alone) allow themselves to believe, but it is a mode of being different from that which is termed real. The question, proposed afresh by Porphyry, was agitated by all the schools precisely in these terms, *to subsist* being used in contradistinction to *to be ideally* or mentally.

In like manner the definition given by us of *real* and *reality* expresses the meaning with which these terms were used by ancient philosophers, a meaning which was faithfully retained by the Schoolmen. Let us cite an example drawn from the beginnings of Scholasticism. In the little work written by Gerbert († 1003) on the question proposed by the Emperor Otto III., whether it is proper to say that the *use of reason* is an attribute of rational being, as Porphyry maintains (*De Rationali et Ratione Uti Libellus**), the author explains the doctrine of Aristotle respecting the distinction between *possible* and *real*, and says that that philosopher admits *possibilities* that may be without *realities*, and other *possibilities* that cannot be unaccompanied by *realities*, and, finally, possibilities that can never be *really*, the last being *abstractions*. This whole mode of speech maintained by the schools—as, indeed, by all philosophers down to our time—shows that they use *possible* and *real* in the sense which we attribute to these words, and that it never entered their heads to confound the *possible* with *zero*. The possible, therefore, or the *ideal*, and the *real* are two primordial modes of being, to be kept entirely distinct. We have further observed that the word *possible* does not properly express the *idea* in its purity, but expresses it accompanied by a *relation* which our mind places in it in comparing it with the real. See *New Essay*, vol. ii., nos. 543-545.

* Published by Pez in *Thesaurus novissimus Anecdotorum*, vol. i., part 2, col. 147.

XIII.

55. The *Ego* is an active principle in a given nature, in so far as it has self-consciousness and pronounces the act of self-consciousness.

Observation.—In the definition given in the *Anthropology* (Bk. iv., def. 7), the *Ego* was said to be a *supreme* active principle. Here, be it observed, the word *supreme* is used to mean supremacy within the sphere of human nature. We might also add to the definition of the soul the qualification *universal principle*, provided we were careful to remark that the soul is not always universal as an *active principle*, but only as a principle, sometimes passive, sometimes active. In fact, when a man says "I undergo a pain or a pleasure," he expresses by the word *I* a principle of passion which suffers, not of action. And although, even in suffering, the principle has a certain activity, yet this species of activity must not be confounded with activity, properly so called, which acts and does not suffer.

XIV.

56. *Nature* is all that goes to constitute a being, or to put it in act.

Corollary.—Hence we are able to draw the distinction between *substance*, *nature*, and *subject*. Substance is the first act, whereby an essence subsists (no. 52). But nature embraces, besides, all that a subject requires in order to subsist, and, therefore, also the necessary term of the act whereby it subsists. For example, the act whereby a brute body subsists is force, and in this consists its substance. But the *nature* of the body embraces likewise the extension in which the act called force has to diffuse itself. It also embraces accidents, not taken singly, in which case they might be wanting, but taken as a whole, when they are necessary. For example, a body may exist without having the round form, and, therefore, this single acci-

dent does not go to constitute its nature. But the same body cannot exist without some form, and thus form in general enters into the *nature* of body, although it does not belong to its substance. The *subject* is the principle of sentient substance. In order, therefore, that a substance may be called a subject, two things are necessary: (1) that it be a feeling, and (2) that it be considered in so far as it is a principle. This second characteristic distinguishes *subject* from *sensitive nature*, because sensitive nature embraces also the *felt*, which is necessary in order that there may exist a substantial feeling; the subject, on the contrary, is only the *sentient*, because the sentient alone has the nature of a principle.

PART I.

ON THE ESSENCE OF THE HUMAN SOUL

BOOK I.

ON THE SOURCE AND PRINCIPLE OF PSYCHOLOGY.

CHAPTER I.

WE MUST SEEK FOR A CONCEPT OF THE SOUL FREE FROM ALL THAT THE OPERATIONS OF THE MIND MAY HAVE ADDED IN CONSTRUCTING IT.

57. One of the chief causes which render philosophical questions difficult and almost insoluble is, that the thinker who exercises his understanding in relation to an object, being obliged to accept it from his own mind, which conceived it (and, if it had not been so conceived, no meditation on it would be possible), accepts it with the utmost good faith, never doubting that he has it exactly as it is in nature, without addition or subtraction. The reason of this is, that he either does not reflect that it is his mind, and not nature, that furnishes him with it, or else maintains the foregone conclusion that the mind presents it to him faithfully, just as Nature herself would do, if she gave it him with her own hands.

58. And yet it is entirely certain that the mind, in placing objects before our thought, does not present them as they are outside the mind, but partly as it has made them by the subjective laws of its own being and operations. Hence, while it has, as its first object, the truth, which never deceives, it has also its own nature, which imposes upon it certain laws, and these laws, although they certainly do not deprive it of the possession of truth,

make the acquisition of truth slow and difficult. Indeed, the mind arrives at truth only when, by the aid of the objective light which shines in it, it discerns within its own thoughts how much is its own work, and how much remains when this is deducted.

59. Hence, one of the cases in which the philosopher has to exercise the greatest amount of vigilance and acumen is when he tries, in any object concerning which he wishes to philosophize, to make the separation between what is due to the operation of the mind and what belongs to the naked object itself, divested of those most subtle veils—we might almost say, dense cobwebs—in which the mind itself has enveloped it. For everyone who philosophizes must, whether he will or no, set out from the intellectual condition in which he is,* and he cannot, as we have said, help receiving the object in the condition in which it is when he begins to philosophize.

60. We ourselves, therefore, are subject to this same necessity when we undertake to expound the doctrine of the human soul. We cannot do otherwise than set out with the concept of the soul which we have; and hence we must, first of all, strive to see whether the soul, as conceived by us, be indeed the soul as it is in itself, apart from our conception—apart from all that our mind may have added in the process of conceiving it.

* *New Essay*, vol. iii., nos. 1466-1477.

CHAPTER II.

THE MONOSYLLABLE *I* DOES NOT EXPRESS THE PURE CONCEPT OF THE SOUL.

61. Now I cannot doubt that I myself, who feel, who think, who speak, am the soul. The soul, therefore, as I at present conceive it, is that being which I mean to express when I use the monosyllable *I*.

62. But does this *I* indeed express the soul without any addition due to the operation of my mind? This is what cannot be discovered except by the analysis of the concept which the word *I* expresses. Now, we have performed this analysis,* and it has shown us that the *I* expresses, not merely the soul, but the soul as united with many relations resulting from several mental acts, which have to be performed before it can pronounce itself in the monosyllable. We refer the reader to this analysis, adding the following observations, which, it is hoped, will help to confirm and perfect it.

63. He who says *I*, meaning what he says, performs an interior act, whereby he pronounces his own soul. The monosyllable *I*, therefore, is the vocal sign pronounced by an intellective soul, or, more properly, by an intellective subject, to designate an act of its own, when it turns its attention inwards upon itself and perceives itself.

64. Fixing our attention at this point, we see:

(1) That the soul which pronounces itself by saying *I* is a real soul. The *I*, therefore, does not express a pure idea; does not express merely the *concept* of the soul, but expresses the *precept* of it. It adds to that which the word *soul* expresses (idea or essence of the soul) the perceived reality.

* *Anthropology*, Bk. IV., chap. iv., nos. 805-810. Translated in *The Philosophical System of Antonio Rosmini-Serbati*, pp. 214 sqq.

65. (2) That the *I* is not the perception of any soul indifferently, but of my own soul. The word *I*, therefore, adds to the general concept of the soul the relation of the soul to itself, a relation of identity. It, therefore, contains a second element, distinct from the concept of the soul; it is a soul which perceives itself.

66. (3) That the soul does not turn back upon itself, or perceive itself unless it is excited and attracted by some new and particular feeling arising in it, either active or passive. The reason of this is that the mere substantial feeling of the soul, being natural and uniform, is not capable of arousing the attention of the soul itself. This attention is a new and particular act, and hence requires, for its sufficient cause, a new and particular stimulus. The soul, therefore, which says *I*, does not pronounce itself as it is in its primitive state, but as already in a state of activity superinduced upon it. It pronounces itself as modified, suffering, acting. The *I*, therefore, expresses the soul with the addition of a third element, which is a modification induced through passion or action; and in general it expresses the "soul as having already passed on to secondary acts;" the soul not enfolded in its potentiality, as it is at first, but in its actuality. In fact, experience shows that when men begin to pronounce *I*, they never pronounce it alone, but always along with a verb expressing their action; for example, "I feel, I will, I think, I act," &c., and it is only later that the work of abstraction and analysis supervenes to separate the *I* from its verb, by considering what the monosyllable *I* expresses when isolated and clearly distinguished from the context, apart from which it never in fact occurs. We are, therefore, obliged to conclude that it expresses the principle of the operations of the soul, or the soul in so far as it is the principle of its various operations.

67. (4) Moreover, that if, in saying *I*, the soul expresses itself as acting; if it says, "That which does this—for instance, wills—is I," this expression includes a fourth element, since it may be translated and resolved into this:

That which wills is the same principle which perceives itself, and consequently says *I*. The *I*, therefore, includes another reflection, and therein a relation of identity, whereby he who speaks and pronounces *I*, means that he perceives himself as acting, as a being identical with that which acts.*

68. Summing up then all the differences which exist between what is signified by *human soul* and what is expressed by the word *I*, we find—

(1) That *human soul* expresses a simple general *concept* of the soul; the *essence* of the soul.

(2) That *I* expresses—

(*a*) An *intellective perception* of the soul, in which, as in every other perception, there is, besides the general concept of the thing, the affirmation of the *reality* given in feeling.

(*b*) Not every intellective perception of the soul, but the perception which the soul has of itself, when it contemplates the feeling which constitutes it a being, and therefore knows itself as a being.

(*c*) A perception of itself, not in its primitive state, as yet unendowed with special powers, but in a state of activity—the soul perceiving itself as the principle of its own acts.

(*d*) Finally, the soul as conscious of the identity between itself as perceiving itself, and itself as acting or ready to act.

* That the formation of the *Ego* includes a reflection of the soul has been observed by others. The Abbé Feller sets out from this observation in order to refute Buffon, who attributed an *Ego* to the lower animals. "The learned naturalist," he says, "has fallen into this error through believing that the *Ego* is made up only of sensation and memory (vol. iv., p. 52). But since the *Ego* is purely *intellectual* and *reflected*, since it is the fruit and fruition of thought, it plainly follows that it cannot occur in the lower animals, even upon the principles which the naturalist himself has laid down with regard to the nature of men and animals."—*Philosophical Catechism*, n. 147.

CHAPTER III.

THE PURE NOTION OF THE SOUL CAN BE DERIVED FROM THE *EGO* ONLY BY DIVESTING THE *EGO* OF ALL THE ELEMENTS CONTAINED IN IT FOREIGN TO THAT NOTION.

69. Notwithstanding all this, there is no way of arriving at a knowledge of the soul except by setting out from the *Ego*. It is in the consciousness of our own souls that we are able to discover what the soul in general is, because the *consciousness* which we have of ourselves is what furnishes us with the *knowledge* of the feeling of the soul, which is one of the prime rudiments of our cognitions (nos. 12-15). Indeed, if we did not feel the soul in ourselves, we should not perceive it; and if we did not perceive it, we should not be able to obtain any positive knowledge of it, even from any other quarter. The words, the signs by means of which a teacher might seek to impart to us the knowledge of it, would have no meaning for us, unless it were to give us that kind of negative cognition which we have described above (nos. 18-20).

70. What then must we do in order to obtain the true and pure concept of the human soul?

We must meditate upon the *Ego*, in which we have the consciousness of our own soul, and, divesting the percept of the *Ego* of all that it contains foreign to the general concept of the soul, draw out, whole and clean, the concept of which we are in search. Let us then gird ourselves for the task.

CHAPTER IV.

UNDERTAKING TO DIVEST THE *EGO* OF ALL THAT DOES NOT BELONG TO THE PURE NOTION OF THE SOUL.

71. In the first place, when the soul says, "I act," it affirms itself as acting. In what manner does it affirm this? In thought, because to affirm is *to think*.

But since the soul, in this operation, thinks itself, to affirm itself as operating is to turn a *reflection* of the soul back upon itself.

If the soul did not make this reflection, if it did not think itself, it would not know itself, which is the same thing as saying that it would not have any consciousness of itself.

Now, is consciousness of itself essential to the soul? In order to find this out, we must see whether the reflection of its thought upon itself is essential to it.

But it is certain that the reflection of thought upon the soul itself is not essential to the human soul. It is certain that this reflection is not born with it; that it does not begin with it; that there was a time when the soul did not know itself, had no consciousness of itself; and that there followed a time in which it began to turn back its thought upon itself, after this thought had had, as its objects, external things different from it.

72. We must not confound the consciousness of the soul with the soul itself. Still less ought we to confound with the soul that act in which it says *I;* and, again, we must not confound the reflection of the soul with the soul itself. Consciousness, *Ego* pronounced, reflection are accidents, not the substance of the soul, which, as a reality, is prior to all its accidental modifications. The confusion of these with the soul itself is the

source of all the aberrations and extravagances in which the German school has lost, and is still losing itself. Reinhold having propounded the principle of consciousness, Fichte reduced the soul itself to consciousness, and then converted it into a reflection; but, since reflection is only an accident, all substance disappeared from his philosophy, and there were left in his hand mere accidents. Hence he himself, at the end of all his reasonings, came to the conclusion that "No being exists, but merely images; all reality is a dream, and thought the dream of that dream." From this labyrinth German philosophy has never been able to extricate itself.

73. Fichte began with this proposition, which contains the error indicated, "The *Ego* posits itself." The proposition is manifestly absurd, because it assumes that the *Ego* operates before it exists. Now, certainly no being can posit—that is, create—itself. He ought to have said, "The soul posits the *Ego*," because this would signify, "The soul affirms itself," and in so doing changes itself into an *Ego*, the *Ego* being the soul as affirmed by itself. Thus the *Ego* is distinguished from the soul, the *Ego* being the soul invested with that reflection whereby it affirms itself. Now, there is nothing strange in the soul's producing this reflection, but it is passing strange that the soul should be the *Ego*—that is, the reflected soul—before it has made the reflection in question.

74. At the same time, since the man who philosophizes is already a fully constituted *Ego*, it is, of course, by no means easy for him to dissolve himself, so to speak, and to persuade himself that his *Ego* is compound, that it is an accidental and not an essential state of the soul; or, to speak more correctly, that it is the soul constituted under accidental conditions.

It may readily be argued that the soul which says *I*, does not affirm any soul indifferently, but affirms itself, and that, therefore, it is an *I* which affirms itself. Indeed, it cannot be denied that between the I and the "own soul" there is identity of substance; but, at the same time, it is

certain that there is diversity of accident, and that it is just in order to signify the union of this accident with the soul that the word *I* is used. On the other hand, if the thing is not so, what strange confusion results! If the *I* affirms itself, it affirms; and if it affirms an *I*, the *I* must be already formed before it affirms it; and so we lose ourselves in a vicious circle.

This difficulty may be explained in another way. If the *I* forms itself by affirming itself, how can it affirm itself before it is? How does it know that what it affirms is itself? In order to know this, it must have compared the *I* that affirms with the *I* that is affirmed, and discovered the identity of the two. But it cannot compare the *I* that affirms with the *I* that is affirmed without having perceived the former. To have perceived the *Ego* that affirms is the same thing as to affirm itself as affirming. This brings us to an infinite series of affirmations, because we can always say the same thing about the object of such a judgment, which becomes the affirming self. It follows that we cannot in this way explain the singular fact of the reflection whereby the soul thinks and affirms itself. When, however, we have made clear to ourselves that the term *I* does not designate properly the mind before it has affirmed itself, but only after it has done so and in this way acquired consciousness, then the difficulty, which at first sight seemed so momentous, vanishes utterly. It only remains to be explained how the soul can perceive itself.

75. In order to do this, we must have recourse to the theory of intellective perception, which we have expounded in the *Ideology* and elsewhere. This theory describes perception as an act of the subject, which, intuiting the essence of being, sees this being realized in feeling. No one can observe that there is being in feeling, unless he first knows what being is; that is, unless he intuites the essence of it. But granting that the subject has this intuition of being, it is no longer difficult to understand how it should see or recognize being wherever it is, under any form, and hence also under the form of feeling, which

is one of the three forms under which being is. This being granted, we can understand how the subject, man, intellectively perceives himself, admitting that the *self* is only a substance-feeling. Just as he perceives any other feeling, so he perceives that feeling which he denominates *himself*. There remains the difficulty, how he knows that the feeling which he perceives in this instance is himself; that is, how he knows the identity between the *self* perceiving and the self perceived. It is plain that if, in order to know this, he had to make a comparison between the two, it would be impossible in any way to explain our perception of ourselves. It must, therefore, be denied that man knows this identity through a comparison between a perceiving self and a perceived self. Once more, therefore, how is he to know it? He must know it immediately in the very perception of self. In what way? In this way. If he sees the essence of being in his own feeling, so that he judges this feeling to be a being; in this perception, as in all others, it is the feeling that determines that the precept is one being rather than another. For this end the feeling must be perceived as it is; it is not altered by the act of perception. It is, therefore, from the variety of feelings that we know the variety of beings. It follows that the nature of feeling must possess the characteristic mark enabling us to distinguish the feeling of ourselves from all other feelings, from feelings that are not of ourselves. Now what must this characteristic mark be? To repeat what has been already said, it must be a *something* immediately perceived in the feeling itself. Now this something which is in our feeling of ourselves, and which forms a part of that feeling—which distinguishes it from all other feelings, is exactly that which is incommunicable in the feeling, that on account of which it is called, "feeling of ourselves;" and if we must express it by a general and abstract term, we might properly enough call it *selfness*. If, moreover, we desire another word to express the selfness of him who speaks, and not of men in general, we should propose to enrich our philosophic language

with the word *meity*, corresponding to the German *Ichheit*. Yes, ownness, selfness, meity, is a something of the feeling which perceives itself (as well as all the other parts of the feeling, and all other feelings) through the essence of being, recognized in them. This sensible *something* is the principle of individuation, and becomes also that of personality, and this exists even before it is perceived. This being granted, it is clear that in the perception of the "own feeling" we perceive ourselves, the expression *ourselves* being taken to mean the ownness of the feeling, or the selfness which is the characteristic mark of such feeling.

76. But when we say "ourselves," do we not express the fact that we have already perceived ourselves? Are we not, therefore, revolving in a vicious circle when we say, "perception of ourselves," since this may be translated into "perception of that which is already perceived?" I reply that the observation is just, and that it reveals to us the powerlessness of language to follow faithfully the mind in its operations. The fact is, language was invented by men already developed, in order to express the product of the operations of the mind, not to follow these operations themselves through all the slow grades of their development. I beg the reader to pay special attention to this, and I will endeavour to explain it more at length. The defect observed in the phrase in question, "perception of ourselves," may be equally well observed in the same phrase when referred to any other perception. When I say, "perception of a thing, of a being, of an object," I employ, I must employ, the words, *thing*, *being*, *object*. But *thing*, *being*, *object* signify something already perceived, and not something to be perceived. And, indeed, a *something* that is not yet perceived can in no sense be called a thing, a being, an object, because these terms cannot be imposed by any one upon things whose existence he does not know at all, since they signify that which in some way is. Indeed, naught is not called a thing, a being, or an object; nay, it would not even be called *naught*, if we did

not wish to signify the negation of things, beings, objects; so that the word *naught* can neither be invented nor used by one who does not already know *something*. Now if the three terms in question signify what has already been perceived, not that which still remains to be perceived, it follows that the phrases, "to perceive a thing," "to perceive a being," "to perceive an object," are as incorrect as the phrase, "to perceive one's self." Both involve the same circle; both mean, "to perceive the perceived."

77. Is it not, therefore, possible to express in words the operation of perceiving? It is, but only in indirect words; and, indeed, we were just now trying to express and describe it. Nevertheless, the operation cannot be translated into words, because all that a man expresses he must have already perceived. A man certainly cannot give a name to that which he has not perceived. If, therefore, we wish to express perception accurately in words, we must say that it is "that operation whereby the spirit acquires a real object," and this operation may also be called *judgment* or *affirmation*, since the spirit does not acquire a real object until it has affirmed it; until it has spoken to itself the internal word *is*. For this reason I have elsewhere said that *real objects* are formed by the spirit in the very act in which it perceives them.*

* Certain persons, surprised that I have not replied to the *Six Letters* of Count Mamiani, have interpreted my silence as a sign of contempt. I wish these persons to understand that I despise no one, and certainly not one of my own countrymen furnished with so much learning as Count Mamiani, whom I have several times in all sincerity commended. I will say, however, that not a few of those who honour me with their observations almost always use, to express my views, words which do not really express them. In such cases, the only reply I can make is to refer them to the expressions used by me; and if I were to do this in each particular case, I should be perpetually going over the same ground. This substitution of other words, and hence, of other concepts, for mine, occurs even in the *Letters* of Count Mamiani, although certainly without his being aware of it. I will cite an example, and thus, breaking the silence which I was minded to keep, give proof of my esteem for this distinguished Italian *littérateur* and philosopher. He finds intellective perception, as described by me, impossible, because "one of the terms remains obscure and unknown by the law of its nature. Indeed," he adds, "in what way can the soul have any intimation of that subsistent sensation, which is the real subject to which the predicate of hypothetical being has to be applied." (Letter IV.) Now, where have I ever used the expression "hypothetical being?" I have called being possible, but not hypothetical, which is an entirely different thing. So true is this that possible being is eternal

78. But if the real object is not there, and cannot be named before the spirit has perceived it, what is it before such perception? It is a feeling, a felt, but not an understood; it is the material of the future object of the understanding, but not yet its object; a being in process of formation in the mind, but not yet the being formed. There is no intellective light in it; it cannot be named as *objects* are named. Feeling can produce nothing but interjections, inarticulate sounds, or even if it does produce articulate sounds, these will not have been applied to it intentionally, as the mind imposes signs on its objects, but merely as natural effects of an efficient and instinctive cause. In the same way the wind howls among the rocks,

and necessary; that is, the very opposite of hypothetical. Moreover, it is not even true that the predicate of the real subject is, according to me, *possible being;* it is being in its common essence. I have frequently declared that *possibility* is only a posterior relation, added, by the reflection of the mind, to innate being (*New Essay*, vol. ii., nos. 539-557); I have declared that it does not constitute the essence of being. I have also shown that the essence of being is identical under the two forms of *ideality* and *reality*, and that the mind finds it equally in both forms. But certainly the mind would not find it in reality if it had not first received it in ideality, since being is called *ideal* only in so far as it is intelligible. Again, as to the objection that "one of the terms remains unknown" in the primitive judgment, I reply that it is indeed unknown until this judgment is pronounced; but this judgment is what renders it known. To the other question: "In what way can the soul have any intimation of that subsistent sensation which is the real subject to which the predicate of being has to be applied?" I reply that, if thought had any intimation of the subsisting sensation, there would be no need to add a predicate to it, because the predicate would be already added. It is, therefore, erroneous to suppose that, in order to form the primitive judgment, we require to know the subsistent sensation, the truth being that this sensation, previously altogether unknown, is just what becomes known and affirmed by means of the judgment. The question is, How is this done? Now, to affirm the sensation is to know it; for, indeed, no real thing is known unless it is affirmed. "But do you not say that between the subsistent sensation and the being predicated of it there is the relation of subject and predicate?" I do; but this relation does not exist until the judgment is formed, because before that neither the one is subject nor the other predicate. Indeed, these two words analyse the judgment already formed; and neither the subject nor the predicate is ever found apart from the judgment. After the judgment is formed, then the subsistent sensation is known, not before; and it is then that it receives the name of subject from the person who reflects upon the formed judgment, and with this reflex act considers the sensation as known, and known as having existence predicated of it. The objection, therefore, which at first sight appears so formidable, is due to the author's not having either correctly understood, or correctly expressed, our theory of intellective perception.

It follows that we must not confound the *synthetic judgment* with the *analytic judgment* which is afterwards added to it by reflection, nor reduce all judgments to this latter form, as even Baron Galluppi erroneously did, when he laid down the general rule: "The judgment, therefore, is only an analysis of the complex perception."—*Elements of Psychology*, chap. i., sec. 8. Cf. *Philosophical System*, nos. 43-50.

or soughs in the trees, without speaking or meaning to impose a mark upon itself, or upon thoughts which it has not. In the same way the various pleasant or painful feelings of the lower animals are the efficient and necessary causes of the various sounds which they emit without any intention of imposing them as arbitrary signs, such as words are, to signify objects of the mind.

That, therefore, which in nature is not perceived is also not named, for the reason that it is not understood. It cannot be called a thing, a being, or an object, and if we speak of it, we must do so indirectly, as I have said, by decomposing the thing, being, or object; that is, by subtracting the perception from the perceived. In doing so, we observe that we do not subtract the whole of the being, thing, or object, but that there remains behind the material element, no longer understood, but yet felt; in other words, the dark, utterly unknown feeling.

Applying this result to the perception of the *Ego*, I say that the word *I* designates this perception as already completely formed, and that, in the object expressed by it, we perceive a feeling, and in it the characteristic mark distinguishing it from all other feelings, viz., ownness, meity.

79. But how then can the mind which perceives itself cognize the identity between itself as perceiving and itself as perceived, as you have said it must do before it can utter itself in the monosyllable *I*? How can it perceive this identity unless it compare itself with itself? Although an answer to this question might be gathered from what has already been said, I will nevertheless endeavour to make the fact clearer by showing that, in the perception of selfness, there is already included the identity between the perceiving and the perceived.

The term of intellective perception is feeling; for that which is altogether unfelt cannot be perceived. We could not, therefore, perceive even our own souls if they were not feelings, terms of perception. But we perceive also our own operations; therefore also our own operations

must be accompanied with feeling. Hence we perceive the feeling of ourselves—of our own souls—along with all those activities and operations which modify and develope them. Now, the act whereby we perceive this feeling, which constitutes our own souls, and which we afterwards express by the monosyllable *I* or *we*, is also accompanied with feeling. It also modifies and actuates the substantial feeling of self. When, therefore, we perceive this "own" feeling, which is the soul, and perceive it with all its actualities, which are likewise by nature sensible, we must necessarily perceive it with the actuality of the perception of itself, because, in the act of perceiving, it has this actuality and the feeling which accompanies it. The act, therefore, of self-perception may be looked at in two ways, as the cause of the perception and as feeling. As the former it produces the perception; as the latter it is the term of perception, and remains involved in the perception itself. Nor is it strange that the same act should be both the principle and the term of perception, when we consider that in every perception, the term (the feeling) is not posterior in time to its principle (the perceiving act); but that the principle and term must be simultaneous in order to produce the perception, since perception is but the point of union between the principle and the term from which it springs. In other words, the soul, when it moves to perceive itself—that is, with its own act reaches itself—finds itself already moved toward this perception; so that the beginning of the act of self-perception is seized by the completed and perfect perception. Hence the identity between the soul as perceiving itself and the soul as perceived by itself is given to man by the nature of perception, so that it is impossible for the perception which is expressed by the monosyllable *I* to take place without including this identity.*

* This truth escaped the notice of Aristotle, as did the truth that the first object of the intellective soul is *universal being*. Hence he could say that "intelligence is an intelligence of intelligence" (καί ἐστιν ἡ νόησις νοήσεως νόησις. *Metaph.* Λ ix., 1074 b 34). But this mode of speaking is absurd, because, if intelligence understands itself, it already exists, and so the definition revolves in a circle.

80. "But why have you said that, in order to know the identity between the perceiving and the perceived, there is required a second reflection, in which man compares himself as perceiving with himself as perceived and finds himself identical?" You must observe that, when I said this, I was analysing the *Ego* as we have it now, as it is given by the consciousness of the man already fully developed. Now it is certain that the philosopher who says, "I, the perceiver, am the same I who am perceived," makes a second reflection (and perhaps one even of a higher order), in which he compares himself with himself. It is only when used respecting the operation which the mind of the philosopher performs that the expressions "perception of ourselves" and "the *Ego* perceives the *Ego*," which we found fault with above, are accurate. The reason of this is that the philosopher perceives the *Ego* as already formed, and meditates upon himself, which means, upon what he has previously perceived, it being the mind, as we have said before, that presents to the philosopher the object of his meditations (nos. 57-60). From not carefully noting this distinction between the *reflex Ego* of the philosopher and the *Ego of first formation*, Fichte lost himself in that interminable forest of errors of his. He did not know this *Ego*, which is the work of the mind itself, and not the naked rudiment which nature gives to the human spirit from the beginning. Moreover, it is thus that we take pleasure in justifying common sense, the author of languages, and their diverse modes of expression. These are always accurate, if they are taken to mean what they were originally intended to mean, but became defective and fallacious by the fault of individuals

And yet Aristotle sets out from a true principle when, searching for the object of the intellect, he says: "It is manifest that it understands that which is most divine and noble" (δῆλον τοίνυν ὅτι τὸ θειότατον καὶ τιμιώτατον νοεῖ. *Ibid.* 1074 b 25 sq.). But when he attempts to define what this most divine and noble object is, he stops short at intelligence, and does not reach universal being; whence he is compelled to define the first act of intelligence as "intelligence of intelligence." From this circle, which is the very same as that in which Fichte lost himself, there is no way of escape save through the system propounded by us.

who try to convert them to uses which they were never meant to subserve. Thus, if we choose to take the phrase, "perception of ourselves," to mean the first perception which a man has of his own feeling, it becomes inept and deceptive, because it was not invented to mean this; but if we take it to mean the reflex perception of the fully developed man it answers admirably, and is veracious.

CHAPTER V.

THE HUMAN SOUL IS A SUBSTANTIAL SUBJECT WHICH EXPRESSES ITSELF IN THE MONOSYLLABLE *I*.

81. The soul, therefore, is expressed by the monosyllable *I;* but, in order to know its primitive and essential state, we must bear in mind that this monosyllable expresses, besides the concept of the essence of the soul, diverse relations in which the mind itself involves it through the operations which it performs upon it.

Hence, having removed the veils of such relations, we have found at the bottom of the *Ego* a *feeling* anterior to the *consciousness*—a feeling which constitutes the pure substance of the soul. We must now meditate on this feeling, prove its existence, and describe its nature.

CHAPTER VI.

OPINIONS OF PHILOSOPHERS.

ARTICLE I.

Philosophers who did not know where to look for the Essence of the Soul.

82. Such proof is all the more important that many philosophers have not observed that they ought to look for the Essence of the Soul in a primitive feeling.*

These went astray in their researches, because their minds were infected by limited and fallacious ontological principles, as are those which are drawn solely from the sensible conditions of matter, and which are, therefore, valid only for matter that appears to the senses, but not applicable to all beings. Hence, these principles were not ontological, but were merely gratuitously supposed to be so.

83. A still greater obstacle to the progress of philosophy has been the immense facility and readiness with which men take that which they perceive with their external senses as the sole type of all beings; just as if all beings must have similar actions and

* If sensists, instead of clinging to transient sensations, had risen to the fundamental feeling, they would have succeeded in discovering the essence of the sensitive soul. The intellective soul they could not have reached without abandoning their system. Condillac, however, admits, in a certain way, a fundamental feeling, although the hypothesis of the statue leads him into the absurdity of making it spring from sensation. We, being beyond measure fond of corroborating our opinions through the opinions of others, will quote a remarkable passage from Destutt-Tracy. "To feel," he says, "is a phenomenon of our existence; it is our existence itself, since a being which feels nothing may exist for other beings if they feel it, but certainly cannot exist for itself, since it does not know of its own existence."—(*Projet d' Eléments d' Idéologie*, Pt. I., chap. I.) These last words mark the sensist, who confounds knowing with feeling. The rest contains a testimony in favour of the doctrine we are expounding.

passions, and all follow the same laws; and just as if there could not be a being differing from all that the senses furnish, and eluding those laws of judgment which are valid for bodies. Now the wings of the mind cannot unfold and extend themselves in free flight through the regions of being, until man observes that all that he perceives with his senses is but the smallest part of being, a series of incipient entities having relation to him, and that it is far transcended by complete being, the science of which includes quite other principles.

84. At the same time, since man cannot stop short with the mere sensible qualities of external bodies, but is obliged by the laws of perception* to suppose the existence of something else, that is, of the act by which bodies exist, he goes on with his imagination and supposes that this other thing, which is necessary to the subsistence of the sensible qualities, has a place, and so he locates it underneath the sensible and superficial qualities, calling it *substance (sub-stans)*, without observing that, if the substance of bodies lay beneath their surface, it might be found by breaking up these bodies and ransacking their interiors, which is impossible.† Now this entity created by the imagination necessarily becomes an inexplicable and mysterious something, and hence the conclusion reached by all our sensists that the substance of things is completely unknown.‡

85. If now, imposing silence on our imaginations, we adhere firmly to reason, the only veracious guide in philosophical researches, we shall readily observe that the act whereby the sensible qualities of bodies exist is nothing but the *sensiferous*‖ *force* which manifests itself, as an *extra subject*, in our animal feeling, when this is modified. This is the first thing that we understand in bodies, and it alone

* *Philosophical System*, nos. 30, 31, 88-94. *New Essay*, vol. ii., nos. 585-614.

† The essence of the soul is only the *idea of the substance of the soul.* Hence to inquire wherein consists the essence of the soul, is to inquire wherein its substance consists; for *substance* means merely *substantial essence.*

‡ *New Essay*, vol. i., nos. 47-64.

‖ *Anthropology*, Bk. II., Sec. I., chap. ix., nos. 230-245. *New Essay*, vol. ii., nos. 630-691.

(determined by its effects, that is, by sensations) is sufficient to make us conceive bodies, and, therefore it is *substance* (§ 52). It is to it that common sense attached the word *body*.

" 86. If, however, reason subsequently discovers that the *sensiferous force*, given to us in *perception*,* requires some thing else in order to exist, this something else, which does not enter into the perception of bodies, may, inasmuch as it is the immediate cause of the force, be indeed called the *corporeal principle*;† but it will always lie outside of the concept of body, which is furnished us solely by perception.

87. These philosophers, therefore, who placed the substance of bodies in an unknown something, not finding it by reason, but supposing it with their imagination, continued their mode of philosophising, even when trying to solve the question: Wherein consists the essence of the human soul?

In the first place, they generalized their doctrine with reference to the substance of bodies. "The substance of bodies," they argued, "is an unknown something which makes the sensible qualities superposed upon them exist. Such, therefore, is every substance." Persuaded, therefore, that every substance has to be conceived or coined on the model of that of bodies, they assumed the substance of the soul to be a kind of support or substratum, utterly unknown, and yet underlying the accidents of the soul.

88. That this mode of reasoning is purely arbitrary is manifest to everyone. We must, therefore, abandon this *learned philosophy*‡ and follow common sense. And common sense marks substances with those names which grammarians call substantives, and which are imposed on all beings perceived by man. Perceived being, therefore, is substance, according to common sense. But if the substances of the things designated by the words are perceived, it follows that they are not unknown, for perceiving is a mode of knowing. We must not, therefore, create sub-

* *Philosophical System*, nos. 88-99.
† *New Essay*, vol. ii., nos. 855-857.
‡ *New Essay*, vol. i., nos. 29-34.

stances with our imaginations; we must find them in perception itself, whenever this is possible.

89. What are the beings which man perceives? Bodies and his own soul (§§ 12-17). If, therefore, we desire to find the substance of bodies, or the substance of the soul, we must look for it in perception. This we have done in treating of the substance of bodies, and we must do the same thing in treating of the substance of the soul.

90. Now, can that be perceived which is not felt? Of course not. Perception is an experimental cognition, and that cannot be experienced of which there is no feeling. In feeling, therefore, we have found the substance of bodies, in feeling also we must find the substance of the soul.

91. But not every feeling is substance. There are feelings which cannot be perceived by themselves, but presuppose another feeling anterior to them, of which they are modifications. We must, therefore, go back to the first feeling, through which all the others are, and before which no other is felt. There must, therefore, be a first and stable feeling, wherein consists the substance of the soul (§ 52), and this is what we have called the *fundamental feeling*.

ARTICLE II.

Philosophers who did not Succeed in Observing the Fundamental Feeling.

92. Just as it is easy to perceive the fundamental feeling and, by a first reflection, to grasp it united with its modifications, so it is difficult, by means of subsequent reflections to distinguish it from its modifications, and to recognize that it is the first feeling and the principle of all other special and accidental feelings.

93. Condillac supposes sensible life to begin the first time his statue smells a rose.* But in this first act

* "*Le moi*," says Condillac, "*est une collection de sensations.*" In this definition what gives unity to the sensations is left out. It is, therefore, a definition of the *Ego* in which the *Ego* is wanting. The same error occurs in the definition of body. "*Un corps est une collection des qualités que vous touchez que vous voyez, etc.*" In this definition of body, body is plainly left out.

which our philosopher supposes, the statue does not perceive anything but the smell of the rose: of the rose itself it knows nothing. However, the writer's mode of expression receives a liberal interpretation. He says that the statue, in smelling the rose, must think itself the smell of the rose. If it must think itself the smell of the rose, it already feels itself, otherwise it could not predicate this smell of itself.

94. Degerando and others have said that only the sensations of touch are accompanied by the feeling of ourselves. Even this statement is manifestly false, if taken strictly; interpreted liberally, it becomes true. In other words, it is true, if it is taken to mean that the sensation of touch is what more than any other assists man to distinguish the *Ego* from its accidental modifications.

95. Galluppi is right in maintaining that there cannot be any sensation apart from our own substantial feeling. "To perceive a sensation," he says, "is to feel oneself modified, and to feel oneself is to have the feeling of one's own *Ego*."* But afterwards he concludes erroneously that "from our first sensation we have a perception of the *Ego*;" † and that our sensible life begins with our perception of the *Ego* and its sensations.‡ He does not, therefore, rise to the fundamental feeling, which lies behind all acquired sensations, or succeed in comprehending that there is a feeling anterior to intellective perception and consciousness. Finally, not knowing the true nature of *object*, he uses this word to signify the term of sensation, which throws him into sensism, while he is struggling to get out of it.

* *Elementi della Psicologia*, sec. 7. † Ibid., sec. 8. ‡ Ibid., sec. 10.

CHAPTER VII.

PROOFS OF THE EXISTENCE OF THE FUNDAMENTAL FEELING.

96. We have already shown elsewhere that this feeling certainly exists,* and here we must refer the reader to those demonstrations. But, as we have happened to fall upon a note, in which, as far back as the year 1821, we stated some grounds calculated to prove the existence of this feeling, we shall lay these before the reader, merely altering the word *consciousness*, then improperly used by us, into *feeling*.

97. In man there exists a fundamental feeling.

Proof I. "I find that I have in my present state a large number of feelings, such as those which come from my body. I have the memory of other sensations which I formerly had; besides, I possess many cognitions and think many thoughts. But I find that all my sensations, past or present, and all my thoughts have something which distinguishes them from one another. In fact, if two sensations or two thoughts had not something to distinguish them, they would not be two, but one. On the other hand, I see that it is always I who think, who perceive, and who do all these things—this *I* myself—and that, if I were not always the same, I should never be able to compare two sensations or two thoughts and discover their diversity. This *I*, therefore, is not the sensations and thoughts, because these are diverse and the *I* is one. On the contrary, the *I* is the subject which possesses the sensations and the thoughts.

* *New Essay*, vol. ii., no. 721.

Hence the *I*, considered in its own nature, is independent of the sensations and thoughts, since these are accidental and continually vary, without ever being able to cause the *I* to vary. If, therefore, I begin with my mind to remove any particular thought or sensation of mine, I observe plainly that I do not thereby destroy the *I*. I feel that the *I* remains. If, then, the *I* remains after I have removed any particular sensation or thought, it is clear that, even if I took away from myself, one by one, all my accidental sensations and thoughts, I should not thereby have taken away the *I*, the essence of which has suffered nothing from being thus divested of its accidental feelings and thoughts. The *I*, therefore, remains, even when deprived of all acquired modifications. In this way I am finally able to form an idea of the feeling which expresses itself in the word *I*, in all its purity and primitiveness.

98. *Proof II.* "Words, which are the faithful portraits of ideas, confirm the same thing. In fact, when I wish to express the act of feeling, I say 'I *feel*.' Now, let us cancel the *feel*: is the *I*, then, I ask, also necessarily removed? No. On the other hand, let us cancel the *I*, and let *feel* remain alone. In this case, I must either suppose *I* to be understood in *feel*, or else *feel* ceases absolutely to have any meaning. The feeling, therefore, expressed in the word *I* exists independently of the particular sensation. The particular sensation, on the other hand, cannot exist without the fundamental feeling, just as the accident cannot exist without the substance, nor the art without the artist, whereas the substance may exist without the accident, and the artist without his art.

99. *Proof III.* "Again, all my sensations only produce states or modes of existence of my soul. This feels that given mode of its being which a particular sensation gives it. But how could it feel its own modes of being, if it did not essentially feel itself? What do we mean by feeling the mode of its own being or

existence? What else than feeling the relation of a given modification to itself? In order that the soul may feel this relation, it must feel itself, because it is to itself that it refers this modification. Hence if the soul did not feel itself before sensation, this would be nothing for it; it would merely be an action upon a being which did not feel itself, and consequently could still less feel anything else.

100. *Proof IV.* "We may also reason thus: Either this action is performed in the soul or outside of the soul. If it be performed outside of the soul, the soul feels nothing; if it takes place in the soul, either this soul is a being which feels, or it is not. In the former case, there is the fundamental feeling; in the latter, the very possibility of sensation ceases. If the soul does not feel itself, how can it feel that which is within itself? A man might as well say that he saw a table, and deny that he saw its form and colour. The modification of that which is sensible is sensible; but the modification of that which is not sensible is not sensible.

101. *Proof V.* "We may state the argument also in this shape. *Why* does the soul feel its various modes of existence produced by sensations? Of course, because it has the faculty of feeling the modes of its own existence. But is not that first mode of existence which is prior to all acquired modification, also a mode of existence? If it is, why should it elude the faculty to which all the other modes are subject? Until some good reason to the contrary is discovered, we ought to say that the being which feels the modes of its own existence, must also feel its first mode—that which precedes all particular change.

102. *Proof VI.* "How can it ever happen that the soul, supposing it does not feel itself by itself, ever comes to feel itself through the modifications which it receives? We grant that such modifications may move the soul to reflect on its own feeling, to compare its own states, and thus to emerge from its natural quiet and perceive its

own feeling; and so to arrive at a more distinct and more satisfactory knowledge of itself. But here we are speaking of feeling pure and simple, and not of comparisons between feelings. We affirm, therefore, that actions performed upon the soul, however strong they might be, could never bring the soul to feel itself, if it did not already feel itself from the first naturally. In fact, those acquired modifications must be considered either before they have modified the soul, or else in the act of modifying it. Before they have reached the soul, they are not yet sensations. In the act of modifying the soul, neither the agents nor their operations can impart sense to the soul, because they themselves do not possess it, and, even if they did, sense is incommunicable. Accordingly, it is the soul that turns the impulses of agents diverse from it into its own sensations. Before these impulses were given to it, therefore, and independently of them, the soul possessed sense, since it does not receive it from them, but gives it to them.

103. *Proof VII.* "No one denies that the soul originally and naturally has the faculty of feeling; but some are not quite willing to agree that it also possesses the act of feeling, because, as they say, act is one thing and faculty is another. And, indeed, we must admit that the particular act is something very different from the faculty that produces all the acts. But the whole question turns upon having a clear idea of *faculty*. Now, this is the way in which I understand it. In order that a faculty may act, it requires certain conditions, and, when these are given, it acts, or becomes a particular act, since a faculty, in so far as it is an act, ceases to be a faculty. Thus, the faculty of vision requires light; the faculty of hearing, the undulations of an aeriform fluid; the faculty of tasting, the savory substance, and so on. Given the proper conditions, therefore, any faculty passes into act. I observe, moreover, that the action depends upon the faculty as its true efficient cause, whereas the other conditions influence only as occasions, excitements, &c. In order, for example, that the

sun may light up a room, the window must be open; yet it surely is not the open window, but rather the rays of the sun, that light it up? There is, therefore, a wide difference between the mere necessary condition and the cause. In like manner, although the contact of the vibrating air is necessary to the organ of hearing, in order that it may hear, still, it is surely my organ, my faculty of hearing, and not the air, that hears. Let it, therefore, be granted that the occasion of sensation is something altogether different from the cause of it, and that the latter is the subject which feels, or the faculty. If, then the cause of feeling is the faculty, and if this acts necessarily when the proper conditions are given, it follows that the faculty does not perform its act in virtue of the exterior things, but in virtue of its own activity, and that it must by itself always be in a certain act, since, if it had not a first act of its own, it would be altogether unintelligible how it could pass from potentiality [δύναμις] to act [ἐνέργεια], there being no sufficient reason for such a passage. On the other hand, as we have said, no action of the body upon it has the power to make it pass from potentiality to act; every action only furnishes it with the occasion for acting. The correct idea of a faculty, therefore, is that which makes it consist in a universal act, preceding all particular acts—which universal act is particularized and specified when there is given to it any individual material upon which it can exercise itself, and to which it can confine its operation. Thus, if I place different objects successively under an enormous mass of iron, it crushes them all with its weight, one after another, not because it begins to act just then, but because it was acting, that is, weighing continually, even when it did not crush any particular object, no such object having been placed under it. If, therefore, the soul's faculty of feeling, taken universally, is already in act, independently of external and particular impulses, then the soul feels itself. When the ideas contained in this proposition are

analysed, it means that the soul is a sentient being, which, indeed, is granted by all.*

* If we take the definition which Aristotle gives of the soul, "*Anima est quo vivimus et quo sentimus et intelligimus primò*" (ἡ ψυχὴ δὲ τούτῳ ᾧ ζῶμεν καὶ αἰσθανόμεθα καὶ διανοούμεθα πρώτως. *De Animâ*, ii, 2, 12; 414 a 12 sq.), it follows that as soon as man is animate, he has also the act of life, of feeling, and of intelligence, and this because he has in him that with which *primo vivit et sentit et intelligit*. In fact, if the soul is that with which feeling takes place, that with which feeling takes place is not, so long as nothing is felt. But the soul is always in man, being, as we shall see, the substantial form of his body. It follows that there must always be some feeling in him: and the same may be said of understanding.

Even from the other Aristotelian definition, "*Anima est actus primus substantialis corporis physici, organici, potentia vitam habentis*" (ψυχή ἐστιν ἐντελέχεια πρώτη σώματος φυσικοῦ δυνάμει ζωὴν ἔχοντος. *De An.*, ii, 1, 5; 412 a 27) we might draw the same conclusion, whatever may have been the meaning of the philosopher who propounded it.

CHAPTER VIII.

THE ESSENCE OF THE SOUL LIES IN THE FUNDAMENTAL FEELING, IN SO FAR AS THIS FEELING IS SUBSTANCE AND SUBJECT.

104. The proofs, as given in the *New Essay*, of the existence of the Fundamental Feeling constituting man, are meant to show the existence of that part of him which has for its term body and space. The proofs set forth in the preceding chapter show the existence of a feeling extending to all that the signification of the monosyllable *I* includes.

We must, therefore, look in the feeling which lies at the bottom of the *Ego* for the substantial essence of the soul.

105. And from what has been said we may now gather some intimations with reference to the nature of this feeling, *e.g.*:

1.° When a man pronounces *I*, he does not mean to pronounce a fleeting and accidental modification, but a real subsistent being, and, therefore, a substance.

2.° Man knows nothing of himself until he has affirmed his own soul, and, in affirming it, he has perceived a subsistent being, which does not inhere in any other as a modification or accident. Therefore, he has perceived a substance.

106. 3.° This subsistent being, this substance affirmed, and, with the monosyllable *I*, expressed, is a substance-feeling, and in this feeling there is an active principle, feeling and operating; and hence the *I* is a subject. (*Anthropology*, Book IV, def. 4, no. 767.)

CHAPTER IX.

ON THE PRINCIPLE OF PSYCHOLOGY.

107. The principle of every science is the definition of the object of which it treats.

The truth is, the definition expresses the essence of the thing, and the *essence* of the thing treated of is the principle of all reasoning with reference to the same. This reasoning takes a wider or a narrower range according as the *cognizable essence* is more or less complete relatively to the being of the thing.

108. The cognizable essence is positive when it is obtained by way of perception (nos. 19-21). Hence those sciences which we have called *Sciences of Perception* (nos. 17-21) derive their principle from the perception of the being which constitutes their object.

109. Perception enables us to know positively the substance of a being, and hence the *substance* positively known in perception is the principle of these sciences. Let us apply these logical notions to Psychology.

110. The principle of this science must be recognized in the perception of the soul itself. In other words, all the reasonings which can be conducted with reference to the soul must necessarily set out from what we know of our own souls in perceiving them. Now, what we first of all perceive of our own souls is their substance. To the perceived substance of the soul corresponds the *substantial essence*, which is nothing else but the substance itself intuited, as possible, in the idea.

111. Nevertheless, we must observe that we do not perceive our own souls except as subjects, and that the soul perceived and, in the *Ego*, pronounced, is not a possible, but a subsistent *Ego*. Subsistence is essential

to it, in so far as it is affirmed. In order, therefore, to conceive a *possible Ego*, or the *idea of the Ego*, apart from perception, we must perform a double operation, in which we transport into the idea not only the perceived *Ego*, but also the perceiving one. In other words, the possible *I* is merely the general possibility of "a soul perceiving and pronouncing itself," as I perceive and pronounce myself. When I say *I*, I express (1) a particular *meity*, (2) my own particular *meity*. Meity is always particular, being in its essence a particular feeling; but this particular may hold the relation of identity either to the I who here and now pronounce it, or to another subject, who likewise pronounces it. This *relation* is what can be universalized, and in this way we come to conceive that which in its essence is "own" and particular, as capable of having a *relation of identity* to the *I*, who now pronounce it, as well as to others, whom I think as pronouncing it. This is the way in which the *I*, which is in its nature particular, and therefore, in itself, cannot be universalized, is universalized. As I have already said, it can be universalized only in the relation of identity between the perceived self and the perceiving and pronouncing self.

112. What, therefore, we know of our own souls in the perception of ourselves is the *immediate* principle of *Psychology*. It is also the remote principle of the sciences which treat of spirits in general, and especially of those spirits which do not fall under our experience. I say "remote," because reasoning must enter into the formation of these (*Pref. to Metaph. Works*, § 28).

113. This direct and truly logical way, by which the sciences have to proceed, was seen, trodden, and pointed out by St. Augustine and by our greatest national philosopher, St. Thomas.

St. Augustine expressly remarks that the human mind could not know any other mind, if it did not first know itself. "*Unde enim*," he says, "*mens aliquam mentem novit, si se non novit?*"* This is equivalent to saying that, if the

* *De Trinitate*, ix, iii.

human mind did not first perceive itself, it would be unable to form any concept of any other spirit, for the reason that it would have no example to model it on. Hence, in the order of cognitions, the cognition of our own souls precedes the cognition of other souls and other intelligences; these, indeed, are known through reasoning based upon the perception which the soul has of itself. Accordingly, the Doctor Saint goes on to say that the mind knows itself through itself, "*semetipsam per semetipsam novit.*"* These words have been abused by some persons, who have tried to deduce from them the doctrine that the human mind is known to itself by its own essence, or, that it does not require any other light in order to know itself, and this in spite of St. Augustine's repeated assertion that neither man nor his mind is a light to itself. If, on the contrary, we suppose the light to be communicated to it from on high, then it does not know itself through an act of reason, which starts from anything else better known to it, but immediately, that is, through perception. Hence he explains that just as the mind knows bodies by the feelings which their actions produce in the organs of sense, so it knows spirits through itself, that is, through that feeling of its own which is the object of its perception.†

114. Again, the Angelic Doctor explains the meaning of St. Augustine thus: He shows that, when St. Augustine affirms that the mind knows itself through itself, he does not mean that it is cognizable through its own proper essence, for this is true only of God; but that it is known by its own act, in other words, that it has a perception of itself directly and without the aid of any inductive reasoning.‡ "Hence," he says, "our intellect does not know itself through its own essence, but through its own act, and this in two ways: (1) in a particular way, and thus Sôkratês or Plato *perceives* that he has an intellective

* *De Trinitate*, ix, iii.

† Mens ipsa, sicut corporearum rerum notitiam per sensus corporis colligit, sic incorporearum per semetipsam. — *De Trinitate*, ix, iii. The word *colligit* is properly used to distinguish the operation of the intelligence which must enter in order to seize the intimations of the sensations.

‡ *Sum. Theol.*, Pt. I, q. lxxxviii, art. 1.

soul by perceiving that he understands."* Here St. Thomas teaches that man knows his own intellect, because he is conscious of understanding. He refers to the act of understanding, because this act is the one which draws our attention to ourselves. Hence, it is really the reflex cognition of ourselves that is thereby explained, and not the immediate perception. But, if we consider that reflection, which is the cause of consciousness, could not exist, if perception did not pre-exist, we may fairly conclude that the teaching of the Angelic Doctor in regard to the reflex cognition which the soul acquires of itself, presupposes the immediate perception. He continues (2): "And in a universal mode, wherein, setting out from the act of the intellect, we consider the nature of the human mind;" which is just what we have said men do in the operations which we call *objectification* and *universalization*.

Hence St. Thomas, in agreement with Aristotle, lays down that the knowledge which we have of our own souls is the principle of all the cognitions which we can have of pure spirits: "*Scientia de anima est principium quoddam ad cognoscendum substantias separatas. Per hoc enim quod anima nostra cognoscit seipsam, pertingit ad cognitionem aliquam habendam de substantiis incorporeis, qualem eam contingit habere.*" †

* *Sum. Theol.*, Pt. I, q. lxxxviii, art. 1.

† See a more detailed exposition of St. Thomas's doctrine respecting the knowledge which the soul has of itself. — *New Essay*, vol. ii, no. 528 n. 2, no. 713 n.

CHAPTER X.

ON THE MANNER OF APPLYING THE PRINCIPLE OF PSYCHOLOGY, IN ORDER TO DEDUCE THE SPECIAL NOTIONS WHICH MUST MAKE UP THE SCIENCE OF THE SOUL.

115. The substance of the soul is *perceptible* to the soul itself, and it would not be perceptible, if it did not consist in a first and fundamental feeling, since that which is not felt in any way is not perceived in any way. Hence, with equal truth and acumen, St. Augustine writes: "*Nullo modo autem recte dicitur sciri aliqua res, dum ejus ignoratur substantia. Qua propter cum se mens novit,* SUBSTANTIAM SUAM NOVIT; *et cum de se certa est, de substantia sua certa est.*" (*De Trinit.* X, n. 16.)

116. But in order properly to apply this principle to the deduction of the special notions which are necessary in order to construct a science of the soul, we must bear in mind several things:

1.° Sciences are not composed of *direct cognitions*, but of *reflex cognitions*. Such cognitions are acquired only when the mind bends itself back upon its direct cognitions. Now it is direct and perceptive cognition, and not reflex cognition, that immediately affirms substances. If, therefore, we inquire what is the *substance* of the soul, and try to render the knowledge of it *scientific*, which cannot be done without the intervention of reflection, we must, after having introduced this, use it again and again, in order to separate the elements which the use of it has placed in the soul, and which, as we have said, do not belong to the naked substance of the soul, but to the reflex concept of it; otherwise we shall be taking, as things belonging to the substance, things which are products of our reflection.

2.° *Reflection* falls much more easily upon the acts of

the soul than upon the soul itself as given in perception, and the acts, moreover, are necessary as stimuli to reflection. But it would be a mistake to conclude from this that every cognition of the soul, even the primitive one, is derived from its acts in such a way that we know it only through its effects, as if we were dealing with something foreign to us and our souls were not ourselves. We reflect upon the acts of the soul and upon the soul itself at the same time. In fact, we should never be able to know that the acts perceived belonged to US rather than to any other subject, if, along with our acts, we did not perceive ourselves as the cause and subject of such acts. In order, therefore, to arrive at the pure notion of the soul, we must, with a new reflection, separate the acts of the soul from the soul itself, notwithstanding that, with the previous reflection, we have given attention to the acts of the soul and the soul itself at the same time.

117. 3.° Finally, when we have objectified the feeling of the soul which lies in the perception of ourselves, and thus universalized the notion, and formed the specific concept of it, then we may, with other reflections, analyse it, and compare the soul with other things known to us; for example, with bodies, in order to bring out their differences and resemblances. Now, what is the rule that must guide us in such analyses and comparisons, if we would not fall into error? The rule is: "Preserve the concept of the soul as it has been given to you by the perception of it and of its acts as related to it, without adding thereto anything arbitrary." This rule is based upon what has been already said, viz., that perception is the principle of the science of the soul. There cannot be in any science more than there is in the principle of that science; hence, there cannot be in the objective and universal concept of the soul more than there is in the perception of the soul itself, from which we have eliminated the concept. If we add anything arbitrary thereto, it is an error. Nevertheless, we do readily add, in a mere arbitrary way, to a concept much that does not belong to it. This arbitrary faculty of affirming is just the

faculty of error. It is usually the imagination that, putting itself in the place of reason, moves our faculty to affirm, or to persuade us to say, that there is in the concept of a thing something which is not there, and thus to define the thing incorrectly, attributing to it a nature which it has not. This is the origin of all false systems respecting the human soul. They are all excluded and refuted from their very origin by the rule stated, that we must compare the concept of the soul with the perception of it, and carefully observe whether all that we have put into the concept is to be found in the perception. Whatever occurs in the perception is a legitimate element of the concept; whatever does not is an illegitimate element, which must be excluded from the concept.

This most simple and beautiful rule was furnished us by one of our two great masters in speculation, no less than in theology—St. Augustine. We have only translated it into modern speech.

118. St. Augustine distinguishes between the self-knowing of the soul and the *thought* which the mind exercises upon itself.* In order simply to know itself, it has only to *perceive itself;* but, in order to think itself, it has to *reflect.* In perception, the soul knows itself as *present,* with reflection it seeks itself as absent, because the scientific reflection in question directs itself to the objective and universal concept of the soul. "Now," says St. Augustine, "errors do not occur in *perception,* but in the work of *reflection;* not in simple self-cognition, but in self-thinking." He, therefore, lays stress upon the necessity that the soul, in order to avoid errors, should think itself as present and not search for itself as absent; which means that it should attend to what is furnished it by the perception of itself, instead of neglecting this and attending to what reflection affirms of it,† as if it were an object

* Ita cum aliud sit non se *nosse,* aliud non se *cogitare,* neque enim multarum doctrinarum peritum ignorare grammaticum dicimus, cum eam non cogitat, quia de mediocri arte tunc cogitat.—*De Trinitate,* x, n. 7.

† We have already shown that *direct cognition* is the criterion of *reflex cognition.*—*New Essay,* vol. ii, nos. 583-628.

foreign to itself, "*non igitur velut absentem se quærat cernere, sed* PRAESENTEM *se curet discernere.** Man must not talk of his soul as of an unknown *tertium quid;* he must not suppose that he does not know himself. On the contrary, he must understand that he already knows himself, and that nothing remains for him to do but to distinguish that *self* which he knows from other things: "*Nec se quasi non novit, cognoscat, sed ab eo quod alterum novit, cognoscat.*" †

119. "The characteristic of perception," adds St. Augustine, "is certainty. Of that which perception tells us of the soul, we cannot doubt." Hence we may derive a sort of test for distinguishing what we know of the soul by perception, from what we have arbitrarily added to it by reflection, concerning which we are wont always to doubt. Thus, for example, that the soul is the principle of feeling and intelligence is admitted by all, and doubted by none; which proves that it is found in perception. But that the soul is fire, or air, or any other body, is said doubtfully, and is not admitted by all. Hence we may conclude that such judgments are arbitrary, that they are errors of reflection exercising itself on vacuity. If they were the result of perception, no one would have any doubt in regard to them.‡ This argument annihilates materialism.

120. This great man points out another excellent test for knowing what does not come from *perception*, which is the firm principle of the knowledge of the soul and hence also the *criterion* for distinguishing the true from the false doctrines with regard to it. When we doubt, he says, whether a given nature, for example, water, be the soul, we observe whether we think this nature in the same manner as we think another which we know for certain not to be the soul. If we do, we say at once that it is not our soul; because, if it were, we should think that nature

* *De Trinitate*, x, n. 12.

† *Ibid.*

‡ "Certa est autem de se [anima] sicut convincunt ea quæ supra dicta sunt. Nec omnino certa est utrum aër, an ignis sit, an aliquid corporis. Non est igitur aliquid eorum."—*De Trinitate*, x, n. 16.

in a manner different from that in which we think all other natures, that is, we should think it as present and as ours, since we think all other natures only as alien to us and absent.*

121. St. Thomas also distinguishes the direct cognition which the soul has of itself through perception from that which it has through reflection, and says that the first is easy and does not admit of error, whereas the second is difficult, because reflection has to be kept within the limits of those things which are contained in perception itself, and the going beyond them has been the cause of the errors into which philosophers have fallen respecting the nature of the soul.†

122. We conclude, then, that the scientific research for the substance of the soul must be purged of three heterogeneous appendages which mix themselves up with it:

1.° Of all those substances or qualities which do not occur in the *perception of our soul*, and which have been added to its concept arbitrarily by man. In this way are excluded the errors of those who have maintained that the soul is fire, air, or atoms clustered together, and, in general, of all materialists.

2.° Of all actual relations to our reflection itself, *e.g.* the soul's consciousness of itself, which is a process added by reflection. In this way are excluded the errors of those ideologists who derive ideas from the soul itself (sub-

* Si quid autem horum esset [anima]; aliter id quam cætera cogitaret, non scilicet per imaginale figmentum, sicut cogitantur absentia, quæ sensu corporis tacta sunt, sine omnino ipsa, sine ejusdem generis aliqua; sed *quadam interiore, non simulata, sed vera præsentia* (non enim quidquam illi est se ipsa præsentius [through feeling]) sicut cogitat vivere se et meminisse et intelligere et velle. Novit enim hæc in se [*i.e.*, by internal perception] nec imaginatur quasi extra se illa tetigerit, sicut corporalia quæque tanguntar. Ex quorum cogitationibus si nihil sibi attingat ut tale aliquid esse seputet, *quæque ei de se remanet, hoc solum ipsa est.*—*De Trinitate*, x, n. 16.

† "Est autem differentia inter has duas cognitiones. Nam ad primam cognitionem de mente habendam sufficit ipsa mentis præsentia, quæ est principium actus ex quo *mens percipit se ipsam*, et ideo dicitur se cognoscere per suam præsentiam: Sed ad secundam cognitionem de mente habendam, non sufficit ejus præsentia, sed requiritur diligens et subtilis inquisitio [this is reflex and scientific cognition]. Unde et multi naturam animæ ignorant et multi etiam circa naturam animæ erraverunt." And he adds that this second cognition consists in "cognoscere differentiam suam ab aliis rebus, quod est cognoscere qualitatem et naturam suam."—*Sum. Theol.*, Pt. I, q. lxxxvi, art. 1.

jectivists), or who suppose that there is no need for explaining the first cognition, as if it were given along with the soul, or as if the soul were cognition or cognizable in its own essence.

3.° Of all that is perceived along with the soul, that is, of those acts of its powers, which are accidents superinduced upon the soul, and not the soul itself, although, as we have said, they are perceived along with the soul. They are perceived for the reason that man is not moved to turn his attention upon himself, and so to perceive himself, except by his own acts, which at first are acts of sense determined by the action of external bodies. Hence, inasmuch as he cannot have the pure notion of the substance of the soul without separating it from its accidental acts, he must separate it even from the act of perception, because even the perception of itself is not the soul, but is only an operation of the soul with which it acquires the first notion of itself. When, then, we separate from the concept of the soul even its intellective perception of itself, there remains behind only the first and fundamental feeling, which is the object of the subsequent perception, and which constitutes the pure substance of the soul. And this observation excludes the errors of those who maintain that the soul is a something altogether unknown and unfelt, or who suppose that under the phenomenal *Ego*, there must be another substantial *Ego*—an error which I have refuted elsewhere.*

123. Finally, by this method of philosophizing in regard to the soul, we arrive at a knowledge of two things, to which, as to highest genera, all psychological notions reduce themselves. We come to know and determine :

1.° What the soul is. It is all that is found in the consciousness of ourselves, or in the *Ego*, when we remove the three appendages of which we have spoken.

2.° What the soul is not. It is not anything of all that does not fall within our consciousness of ourselves,

* *Restoration*, Bk. II, chap. xiii-xvii.

or any of these three appendages which we ourselves, either with our imagination or by reflection or by perception, introduce into it or add to it.

We must, therefore, now proceed to meditate upon this substantial feeling which lies at the basis of the *Ego;* we must distinguish its properties, and, finally, furnish a more complete analysis of it.

BOOK II.

ON SOME PROPERTIES OF THE ESSENCE OF THE SOUL.

124. In the preceding book we pointed out the source of psychological doctrines, and found it to lie in self-consciousness. At the same time we determined the PRINCIPLE OF PSYCHOLOGY, which lies in the essence of the soul, and has been found by us to consist in a *first feeling, immanent and wholly substantial.* The task which we have set ourselves in the present book, and in the three following ones, is (by meditating on this feeling) to unfold, and, by an accurate analysis, to discover the elements, the endowments, the attributes of the essence of the soul, excluding those which are falsely added to it; and thus to expound the theory of it both in its negative and in its positive parts. This we shall do by showing, on the one hand, what the soul is not, and what separates it from other substances; and, on the other hand, what it is in itself. Girding ourselves for this task with all the powers at our command, we shall begin by speaking of the negative endowment of unity.

CHAPTER I.

ON THE UNITY OF THE SOUL IN EVERY MAN.

125. Since we must draw our entire positive theory of the soul from meditation on the *Ego*, we call attention, in the first place, to the fact, that the soul is one in each man, because each man is never more than one *Ego*.

126. This immediate and evident demonstration of the unity of the soul excludes the error of those who have assigned to man three souls, giving him all at one time—a vegetable soul, a sensitive soul, and an intellective soul—as well as of those who have given him two souls, a sensitive soul and an intellective soul. The source of these errors is very plain. Those who fell into them did not look for the human soul in the *Ego*, where it is, but elsewhere, where it is not. Even granted that there were united to man a principle of vegetation and sensation distinct from the *Ego* (and this may very well be), it would not be the human soul, but something different. Hence it is as plain that the human soul is one, as it is plain to every man that he is one, and not two or more. It is evident, because consciousness tells him so; and consciousness is precisely the perception of the soul or includes it, and hence is the only trustworthy and infallible witness in this matter.

We shall afterwards answer some objections that might be made to this truth (Bk. V, chap. 1).

CHAPTER II.

THE SUBSTANCE OF THE SOUL IS THE SOLE PRINCIPLE OF ALL ITS OPERATIONS.

127. But notwithstanding that the soul is one because consciousness, the immediate testimony which it gives us of itself, tells us so, still its acts are many and diverse, and they are not only simultaneous but also successive.

What, then, is the relation between the soul and its acts?

It is the relation between the *Ego* and that which it suffers [πάσχει] or does [ποιεῖ].

128. Now when a man says: "I feel, I understand, I will, I move," &c., he declares himself to be the cause and subject of all these actions, be they passive or active. Therefore, the *Ego* is the sole principle and subject of all the passions and operations of the soul. But the *Ego* is the soul itself, its substance as perceived and affirmed by us. Hence "the substance of the soul is the sole principle of all its various operations."

129. Furthermore, this principle is sensible, because the *Ego* feels itself. It is a first original and substantial feeling, because the *Ego* is felt by us as such.

Hence: The soul is an original and stable feeling, sole principle and sole subject of all other feelings and of all human acts.

130. To describe accurately this first sense-principle, separating it from inferior active principles, is properly to describe the essence of the human soul. We shall see, therefore, how the soul contains, as their principle, all its own operations, all those appendages which it afterwards,

in the course of its development, assumes; how it is the first act, as distinguished from second acts, and how the second acts are virtually contained in the first.*

* Even this is a fact to be observed, and not to be deduced or combatted by reasoning; and this indeed was observed by the great philosophers of antiquity. In agreement with these, St. Thomas writes (*Sum. Theol.*, Pt. i, quæst. lxxv, art. 5 *ad* 1), "*Primus actus est universale principium omnium actuum, quia est infinitum virtualiter, in se omnia præhabens, ut dicit Dionysius.*"—(*De Nom. Div.*, chap. v.) This is true absolutely of God and relatively of all first acts.

CHAPTER III.

ON THE SPIRITUALITY OF THE SOUL AS DIRECTLY DEMONSTRATED BY CONSCIOUSNESS.

131. Those who find difficulty in agreeing to the truth here indicated, are under the influence of a prejudice that there can be no other feeling than a corporeal one. But this, as we have said, is a prejudice. In it the species is mistaken for the genus. The corporeal feeling is easily cognized, and so the arbitrary conclusion is drawn that every feeling must be corporeal. From the particular a sudden leap is made to the general. In spite of this, it is manifest to the careful observer of nature, that there are feelings altogether different from those which our own or foreign bodies produce in us. On the other hand, no one can show it to be absurd that we should have spiritual feelings, that is, feelings which terminate in no extension and in no matter.

132. Now that there is such a feeling we very easily discover through meditation on the *Ego* itself. The feeling which this word expresses is altogether alien to any corporeal phantasm: it represents neither extension nor form, nor colour, nor any other property of any body.

Hence, the substance of the soul, as expressed in the monosyllable *I*, is incorporeal, and altogether immaterial; and every time that we add thereto anything corporeal or material, we merely, with our imaginations, add to the *Ego* that which is not in it, but is the term of its acts. And this we do in spite of the fact that, as we have seen, the soul is neither its own acts nor the term of its own acts, and that we must separate all these from it, if we wish to grasp it in its purity.

133. But a substance which has none of the properties of body or of matter is called spiritual or *spirit*. Hence the human soul is a spirit.

CHAPTER IV.

ON THE IMMORTALITY OF THE SOUL AS IMMEDIATELY PROVED BY CONSCIOUSNESS.

134. Now, if the soul is a substance altogether different from the body, we cannot from the death of the body infer the death of the soul.

135. Moreover, the word *death* means simply the cessation in the body of the acts of life and animation; hence the word *death* refers only to the body and cannot without absurdity be attributed to that which is not body. But *spirit* signifies a substance which is not body; hence the spirit is not subject to death. But the soul is spirit (no. 133). Therefore, the soul is immortal.

136. At the same time, a doubt may arise in those who have not fully seized the force and connection of the preceding propositions, as to whether there would remain in man a feeling of self, if he were deprived altogether of his corporeal feelings and stripped even of the body itself. This doubt arises from observing that nearly all the operations of human thought require images or other corporeal feelings, whence it appears that those cognitions are accompanied by a corporeal feeling, rather than that they themselves are sensible.

But we say that even intellective operations are sensible in their own way; we believe, indeed, that the very essence of man consists in feeling, as we have said, so that if the realized essence of man were not sensible, man would not be, or be able to perceive himself.

137. The objection for the most part vanishes, when we observe that, if intellective operations were not sensible in their own way, they could not even become so by the addition of animal feelings. The truth is that animal feeling

presents to our perception nothing but itself. Now we know quite well how to distinguish what is presented to us by animal sensibility bound to space, from what is presented to us by the sensibility of merely intellective operations, which have nothing to do with space. In a word, we speak of our intellective operations, for example, of reasoning. We find in them properties altogether contrary to the laws of matter, for example, the inexistence of consequences in their principles and the fact that both are outside of space; the simplicity of an act which, acting outside of space, unites consequences with principles, &c., &c.—properties incompatible with animal feelings. But we should not be able to speak in this way of intellective operations, or to find in them those properties which are incompatible with the feeling of the animal, if they, with their immaterial objects, were not in some way sensible to us, because, as we have already said, *feeling* is the first rudiment necessary for every discourse of reason (§ 12). Hence, even those intellective operations are accompanied by their own proper sensibility.

Now, if intellective operations are accompanied with sensibility, we must say that even the first of all these, the immanent essential operation which we have called "the intuition of universal being," is sensible.

Hence, even if the soul were deprived of all animal feelings, stripped of its body, and reduced to a pure act intuiting being, it would nevertheless still retain a feeling of itself. But we must be very careful not to form a false and impure concept of this spiritual feeling.*

138. We must add to it nothing that is of the nature of corporeal feeling. We must also understand that the act of intuition does not at all extend beyond its object (being); whence it is, so to speak, a spiritual feeling of the object, which reveals nothing beyond the object which is its term, but which, being an activity, has a principle different from the object to which it adheres in a mode

* See *Theodicy*, no. 848, and *The Opinions of Philosophers in Regard to the Nature of the Soul*, nos. 48, 49.

essential to it, and from which it cannot detach itself without falling into naught. It follows that the peculiar sensibility of this intuitive act is due to the nature of the object intuited by it, and that, without the intuition of the object, this act would not be sensible, since it would not be at all.* The sensibility, therefore, of the primitive intuition comes from the object, as referred to the sentient subjective principle.†

139. Hence we may conclude that, in itself, the human soul, even when separated from the body, retains a feeling of its own, (though without reflection), and, therefore, retains its essence, which consists in feeling, and lives immortal. This is the very strong argument for the immortality of the soul given us by St. Augustine.‡

* When Cicero wrote, "*Mens ipsa sensuum fons est atque etiam ipsa sensus est*" (*Quest. Acad.*, iv, 10), he showed on the one hand that he did not sufficiently discern the difference between the animal sense and the mind; but, on the other, that he knew the mind itself to be a kind of sense.

† See *Anthropology*, Bk. I, Sec. I, chap. xi, xii [nos. 258-268], where I have shown that every feeling has essentially a *principle* and a *term*.

‡ Qui vero ejus [animæ] substantiam vitam quamdam, nequaquam corpoream (*i.e.*, an incorporeal feeling) quandoquidem vitam omne vivum corpus animantem ac vivificantem esse repererunt, consequenter et immortalem, quia *vita carere vita non potest*, ut quisque potuit, probare, conati sunt.—*De Trinitat.*, x, n. 9.

CHAPTER V.

ON THE IDENTITY OF THE SOUL IN ITS DIVERSE MODIFICATIONS.

ARTICLE I.

Explanation of the Difficulty.

140. I feel in different ways, I think different thoughts, I suffer, I enjoy, I meditate, I act, and it is always the same I who do all this.

Hence that feeling which lies in the *Ego* is, on the one hand, identical, on the other, continually changing. Is not this a contradiction? But can there be a contradiction in a fact? Or are there two feelings in the *Ego*, the one immutable and the other mutable? But, in this case, how can the immutable feeling feel the changes of the other without receiving them into itself. And if it receives them into itself, it is not immutable, because these become its different sensations—modifications of itself? But, if the various sensations must occur in a single principle, in order that there may be something to feel them, and to feel them as successive and variable, it is useless to have recourse to two feelings, the one changeable and the other unchangeable, since it must be the very feeling that does not change that feels that which does change. We are, therefore, obliged to return to the single feeling. But how? Shall we say that the single feeling is always partly the same and partly different? In this case we are met by the same difficulty as before. Will it be the part which is always the same that will receive the various modifications arising from the mutable part? If this be the case, we may repeat the same reasoning which we

applied to the hypothesis of two feelings. The immutable part becomes mutable, as soon as it admits into itself the various feelings of the other, and so feels and affirms them, and in feeling and affirming them, becomes modified. Does there then remain no immutable part in the feeling of the *Ego?* If there does not, how is it identical in diverse times and in diverse places, conditioning, as a subject, an infinite number of different sensations and thoughts?

141. The sagacious reader will not have failed to observe that this is one of the hardest knots in Psychology, a knot which has been little studied, a knot, we might almost say, that has been neglected by philosophers. If, then, our principle holds good that, wherever in the sciences there occurs a grave difficulty, there there is hid a precious secret of nature, which, when unveiled, enables science to advance freely and rapidly for a long distance, is it not right that we should meditate carefully upon this mystery of the identity of the *Ego*, which we have been propounding?

142. Our meditations must, of course, begin by putting on one side what is evident. The philosopher must not abandon what is certain, because he meets with some seemingly insuperable difficulty in it. Now my own identity is evident. I am sure that I am always the same *Ego* in different times and places, as undergoing and as performing different things. This identity I find in my own feeling, in that part of it which we called *meity*. And this feeling is perceived; it is not inferred or liable to error. We have, indeed, already shown that the consciousness of ourselves is the supreme and infallible criterion of psychology. Hence, even if we were unable to understand how the identical feeling receives into itself various modifications without ceasing to be identical, its identity would not on that account be less true. But let us see whether we cannot find the right end of the thread in this tangled skein.

ARTICLE II.

Beginning of a Solution.

143. In the first place, we must observe that, when a man says, "I experience and have experienced various sensations; I perform and have performed various operations," he always exercises an intellective operation of the same form. All that changes in it is its term. This operation is called *affirming*. Hence the *Ego* sometimes affirms that it feels in one way, sometimes that it feels in another; sometimes that it suffers; sometimes that it acts; sometimes that it acts in one way, sometimes that it acts in another; but it always *affirms*. Hence, if the form of the operation is always identical, whilst its term always varies, we must conclude that there is a species of identity compatible with a species of variety, and that the act which the *Ego* performs in affirming its own feelings is different from the term of this act—the feelings affirmed.* Hence the affirming *Ego* is different from the feelings affirmed; these are the objects in which the act of the affirming *Ego* terminates; but they are not the affirming *Ego*. May not then the *Ego* remain unmodified, inasmuch as it is an activity affirming feelings, which, though they change, are different from that activity? But then how shall the *Ego* affirm them, if it is not affected by them? And, if it is affected by them, how can it remain unchanged, unmodified? Let us admit that the *Ego* is affected by the feelings which it affirms: our solution consists in separating the affirming *Ego* from every other activity or possibility that can occur in the *Ego*. May not the fact, that the *Ego* is affected by always new feelings, be the cause why the *Ego*, in affirming them, always performs the same operation? The affirming *Ego* then is an activity which does not

* Be it observed that under the expression, "feelings affirmed," there are included the operations of the spirit, because even these are sensible, as we have already stated (nos. 136, 137); and it is only in so far as they are sensible—that is, in so far as they are feelings—that they can be objects of affirmation. Nothing that happens in us can be affirmed if it is not felt in some way.—See *Theodicy*, no. 153.

change, however much the affirmed feelings may change. By these the *Ego*, in affirming, is not changed, but always remains equally affirming. Indeed, it is necessary that the *Ego* should be affected by various feelings, in order that its activity, which always remains the same in affirming them, should be able to repeat its own acts. The *Ego*, therefore, in so far as it is *an affirming activity*, remains the same, however many and various feelings may arise in it. Now, from this observation it results that the feelings, in so far as they are objects of affirmation, have no power to change the affirming activity. This in the *Ego* remains the same, although in the *Ego* itself these change.

144. From the depths, therefore, of the *Ego*, there springs the *affirming activity*, behind the feelings which develope in the *Ego* itself. The former affirms the latter, without the latter's being able to cause any modification in it, for the reason that the *activity of affirming* is different from its objects. But in order completely to prove the identity of the *Ego*, we must explain several things, and principally how the identical *Ego* can be the principle of different activities, viz., of the activity of feeling and of the activity of affirming. The truth is, we must either reduce the different activities to one, or break up the *Ego* itself into two. In fact, the *Ego*, in so far as it affirms, is the affirming activity; in so far as it feels, it is the sentient activity. If, therefore, there are two activities, the one altogether different from the other, we must also say that the *Egos* are two, one affirming, the other feeling, and then we are back again at the original difficulty, which renders affirmation altogether impossible.

ARTICLE III.

Continuation.

145. We will first show that, although feeling and intellection are each made up of two elements (principle and term), this does not in the least interfere with the unity and identity of the subject.

In order to accomplish this, let us take up afresh the whole argument, disposing it in a series of lemmas, in such a way that we shall be led slowly to a demonstration of the general theorem, that the multiplicity of the feelings and operations of the *Ego* does not interfere with its unity or identity. We must proceed with all the more distinctness in this very subtle argument that we must borrow many of our concepts from *Ontology*, our treatise upon which we have not yet published. Whence, in many cases, we cannot point to things as already demonstrated, but are obliged to investigate them in company with the reader.

LEMMA I.

146. In every feeling there are distinguishable two opposite elements, the feeling and the felt. This was shown from the analysis of feeling in the *Anthropology*.*

LEMMA II.

147. Every feeling is one and simple; that is, the *feeling* and the *felt* (the principle that feels and the term that is felt), which are distinguished in feeling, are not two feelings, but a single individual feeling. It was also demonstrated in the *Anthropology*,† and, indeed, it is self-evident, that a sentient principle does not exist without some *sensum* [felt term], nor a *sensum* without something sentient. Hence, from these two conditions there arises a single feeling.

148. *Corollary I.* The feeling, therefore, and the felt are reciprocally conditions of each other. The law of synthesis holds good of them, because, when both are given, the one is distinct in concept from the other; but when only one is given, it no longer subsists, nor does even the concept of it remain.

149. *Corollary II.* Since the one does not subsist without the other, and since there is no concept of the one without that of the other with which it is correlated, it is

* Bk. II, Sect. I, chap. ix-xiv, nos. 213-322. † *Ibid.*

plain that they must constitute a single feeling and be found in every individual feeling. Every such feeling is merely their union in act. The law of synthesis, therefore, which unites the felt to the feeling, is a new speculative proof of the simplicity and unity of the feeling which results from it.

150. *Corollary III.* From this fact of feeling we may deduce two general propositions. *First:* that it is not absurd, but natural, that there should be individuals resulting from several elements distinct in concept, without the multiplicity of their elements interfering with their simplicity or unity. *Second:* that elements together form a single individual, when they do not exist outside of it, and it results from the act of their union.

LEMMA III.

151. In every intellection there are distinguishable two opposite elements, the intelligent and the understood.

This proposition likewise was demonstrated by analysis in the *Anthropology*.*

Hence we may deduce corollaries similar to those deduced from the two preceding lemmas.

* Bk. III, Sect. I, chap. i, nos. 505-509. The duality of thought was clearly pointed out by a medical philosopher of last century, Abraham Kaan Boerhaave, in a book which well deserves to be read: *Impetum faciens dictum Hippocrati per corpus consentiens philosophiæ et philologice et physiologice illustratum* (Leyden, 1745). In this work we read, "*Mens ducitur id, quod cogitat. Hæc prima est proprietas quæ mortalibus de mente scitur. An ergo cogitare ipsa mens est?*" Here we feel the Cartesian school, which recognises that an act of thought is necessary in order that the mind may exist. A little further on we find: "*Habet hæc cogitatio in se bina, cogitans nimirum et cogitatum* (nos. 9, 10). But the imperfection of the Cartesian theory manifests itself still more afterwards when the author, after telling us that the mind is thought itself, because this is the first property of the mind that reveals itself to men, adds that, "*neque sciri neque definiri potest cogitatio.*" In the first place, there is an open contradiction between saying that *thought* is the first known, and saying that it can neither be known nor defined; in the second, a door is opened to scepticism, if the whole edifice of human knowledge is founded upon that which can be neither known nor defined. We say that thought, or the human mind, knows and defines itself; and it does not deceive itself because the truth of knowledge is not a creation of this its act of knowing, in which case it would be a subjective process, but is something given to it by the being which it intuites and which is truly the first known.

LEMMA IV.

152. In the order of feeling, the agent is the sentient, and the felt is the term of this action.

Explanation. We have said many times that to feel is to suffer [πάσχειν]; how then can we say that, in the order of feeling, the agent is the sentient? We must pay all attention to this phrase, "in the order of feeling." Activities and passivities are frequently intermixed and intertwined in the same being;* so that in one being there are sometimes distinguishable several passivities and several activities alternating with each other and commingled according to the various aspects in which they are considered; and they belong to the intrinsic order of that being. It is, therefore, beyond question that the principle which feels is passive to the felt, in so far as the felt makes it actual in that mode; but it is likewise certain that it is the sentient itself, and it alone, that feels—that the felt does not feel. Hence we said that, "in the order of being," the active is the sentient, because the felt, in so far as it is felt, feels nothing; on the contrary, it stands in opposition to the act of feeling, being the term in which that act rests.

153. *Observation I.* Hence it is that the *sentient* is called the *principle* of feeling, which means the active part of it, and the *felt* the *term* of it, which means the part that, in the order of being, is not active, although, at the same time it cannot be called passive.† In fact, the felt, as such, has no sensitive activity; at the same time, it does not suffer from the sentient.

154. *Observation II.* The *principle* of feeling is wont to be called also *subject* or *subjectum*.‡

* Anyone wishing to see an example of the diverse actions and passions from whose conflict, so to speak, a being results, is referred to the *New Essay*, vol. ii, nos. 1005-1019, where we have shown from what actions and passions between body and soul the human individual results.

† We have shown in the *Restoration*, Bk. I, chap. xlvii, that the dictum, "There is no action without corresponding passion," contains a materialistic prejudice altogether contrary to what is proved by a philosophical observation of various beings.

‡ It would be well if we were always to observe the distinction, which I have made in some places, in the use of these two words, employing the former to designate that principle of feeling or

LEMMA V.

155. In the order of intelligence, the agent is the intelligent, and the understood is the term of its action.

156. *Observation I.* Hence, the intelligent is called the principle of understanding (no. 153).

157. *Observation II.* The term of intelligence is not in any way passive; it is merely not active in the order of understanding, because it is not that which understands. In a superior order, it is, nevertheless, active in its own way, because it is that which makes the intelligent understand.

158. *Observation III.* The mode in which the term of understanding makes the intelligent understand is not such as to change the intelligent, in the way that a body, impinging upon another yielding body, changes its form, as if the intelligent were prior to that which makes it understand: it is a mode of creative action, to which nothing corresponds on the other side of the relation. Moreover, observing attentively with our minds in this way, we see that the understood is in the intelligent, notwithstanding that it preserves its own essence distinct from that of the intelligent. Hence its mode of action may also be called a *communication of itself*, to which there does not correspond a *passivity*, but a concept of *receptivity* and first potence.

159. *Observation IV.* The principle of understanding likewise is called *subject* or *subjectum*.

CONCLUSION.

160. If the felt performs no action in the order of feeling, and the understood no action in the order of understanding, and if the agent alone is the principle of feeling and understanding, and alone is called *subject*, it is manifest

acting, which is substance, the latter to indicate that special principle of feeling or acting, which is faculty. The consistent use of two words to distinguish these two opposite principles would often render our reasonings more brief and clear.—See *Philosophy of Right*, vol. i, Essence of Right, chap. II, a. I, p. 137.

that the duality (principle and term) which is met with in feeling, detracts nothing from the simplicity and unity of the sentient and intelligent subject.

ARTICLE IV.

Continuation. The sentient and intelligent subject remains the same, however the terms of its actions and its actions themselves may change.

161. We now come to prove a second thesis, viz., that the sentient or intelligent remains the same, however its terms may change, that is, in the former case, the felt; in the latter, the understood.

The difficulty which makes it necessary to prove this thesis is this, that, although from what has been said, it appears that the felt and the understood are outside the sentient or intelligent nature which constitutes the subject, so that, by adhering to it, they do not render it multiple, or deprive it of its unity, it is, nevertheless, true that they are conditions determining its activity. For this reason, it seems that when these conditions change, the sentient or intelligent principle ought likewise to undergo some modification. And, indeed, feeling in one way and feeling in another, as well as understanding more or less one thing or another, are accidents which change the action of feeling or the action of understanding.

162. Now, we must, first of all, make the question distinct, by determining clearly the various parts of which it consists. This we shall do in the following observations.

In the first place it is certain that any given real individual may preserve its identity although several things change in it.

163. In order to see how this is, we must establish the fact that not everything that is in an individual is what gives it its name, or constitutes it that particular individual, that subject.

This appears from the analysis, which we made above, of feeling and intellection. From this analysis, it appeared that what is called sentient subject is not all that is found

in feeling, but only the active principle of feeling, and that what is called intelligent subject is not all that is found in intellection, but only the active principle of intelligence. This is sufficient to show us that the solution of the thesis which we have proposed to ourselves must depend upon the accurate determination of what in a given subject must remain unchangeable, in order that the subject may preserve its identity.

164. In the case, therefore, of the sentient subject, as well as of the intelligent subject, we have already found this much certain, that the immutability we are looking for cannot and must not be found anywhere save in the principle of them. Now, supposing that the felt or the understood changes, it cannot be denied that the action or the sentient principle or the intelligent principle also changes, since the action is directed to other terms, or increases or diminishes toward the same terms. But we must observe that the *action* must be carefully distinguished from the *principle of the action*, and that nothing prevents us from thinking that the principle remains identical and immutable while the action changes.

165. It may be said: If the principle acts diversely, it is itself subject to change. To say this would be to show that the distinction which we have drawn between the principle of an action and the action of a principle has not been properly seized. The principle is united to the action, but it is not the action. If it were the action, it would cease to be the principle of it. The word *principle* designates a first, simple and immutable point. If anything is added to it, it is no longer a principle. It is true that it cannot be disjoined from the action; but it can and must be really distinguished from it. Here again we find the law of synthesis, by which two things are inseparably united without being confounded with each other. The principle, therefore, being a simple point, logically prior to the action, which may be represented as a line originating in it, it is not absurd to imagine that from one and the same principle several different actions should proceed.

just as it is not absurd that several lines should start from the same point, without that point's changing.

166. The principle of action may and must, therefore, be separated by our thought from action itself, the former being recognised as immutable, the latter, as mutable.

But, if the action takes place in virtue of the principle, we must admit that all the actions which proceed from a principle are virtually contained in that principle. Certainly, and this is what the *consensus* of the human race testifies to. It was from observing this that men arrived at the concept of virtuality, potentiality, first act, as distinct from second acts, which are the actions that flow from the first act. In the first principle, therefore, there is a certain activity, from which, under the proper conditions, the actions spring. This activity, *potentiality*, *virtuality*, *first act*, or however we may choose to call it, remains always the same, one, simple, prior to all actions, and to it men give the name of *substance*, a name from which all actions are excluded, just as they apply to it that of *substantial subject*. So true is this, that all agree in separating the principle of actions from the actions themselves, and in feeling the importance of making this distinction in speech.

167. It was in this way likewise that the common distinction arose between *substance* and *accidents*.

"Substance is that which the mind conceives in a being, without having to recur to anything else, in order to form a first concept of it." It is clear that we cannot conceive the accident by itself alone, and that we must recur to the substance by which it subsists. In like manner, we cannot conceive actions by themselves alone. The mind, in order to have the concept of them, must recur to a principle which produces them, because second actions cannot stand without their causal principle. But when I have succeeded in finding the first principle of action in any given order of activities, I cannot go any further: I must stop. When the mind, therefore, conceives this first principle, without being obliged to go back to any other ulterior principle in

the being in question, it stops and declares this principle to be in itself existent.*

168. Substance is likewise defined as "the act whereby the specific essence subsists" (no. 52). Now, in any subject, the first principle of action is precisely that first act in which all actions subsist; and, hence, the first principle of feeling and the first principle of intelligence, if they stand separate, are substances.

169. Hence it is that, since the first act of a being is that which constitutes its substance, and the second acts are usually accidental, we are wont to add to the concept of substance that of immutability and permanence *relatively to its actions*, and to attribute to these mutability and transitoriness.

170. Here, however, the question arises: What is that which determines a first act (a substance) to have in it a virtue extending to one determinate group of second acts, rather than to another? And the reply with reference to the possibility of these groups must be sought in the intrinsic order of being, which order excludes the possibility that certain actions should occur together as virtually comprehended in one potentiality, and allows certain others to be associated and to merge in one potentiality.† As to the real subsistence of these substances, the sole ground of it lies in the will of the Creator, which called to the act of subsistence some, rather than others, of those substances not involving contradiction.

171. I cannot help making another observation, which is, that all the activity of the sentient principle is determined by the felt, and all the activity of the intelligent principle by the understood. This results from the analysis which we have made of the sentient and the intelligent. We have seen that the sentient does not feel, except in so far as something is given it to feel, and that

* It may be said, "The first principle itself is not conceived except in relation to actions." This is true; but the mind may abstract from these, it being enough that it should conceive them as virtually contained in the principle. It is one thing to ask, "In what way does the mind form the concept?" another to ask, "Does this concept, *when formed*, stand by itself without requiring the aid of any other?"

† See *New Essay*, vol. ii, no. 649.

the intelligent does not understand except in so far as something is given it to understand. If, therefore, the felt determines the activity of the sentient, and the understood that of the intelligent, it follows necessarily that the sentient, in order to remain identical, must have inherent in it, from the beginning of its existence, a felt in which are virtually comprehended all future sensations. And, in like manner, if the understood determines the sphere of the activity of the intelligent, the intelligent cannot remain identical in its successive intellections, except upon condition of having inherent in it, from the beginning of its existence, an understood, in which are virtually included all the objects that can afterwards be represented to its understanding.

172. Any one who has fully seized this observation will find in it a new and very cogent proof of our theory with respect to the fundamental feeling (nos. 96—104) and to the universal being naturally intuited by the soul, since only upon this theory is it true that man, in so far as he is sentient, virtually feels, from the first moment of his existence, all that afterwards occurs to him to feel distinctly corporeal sensations being nothing more than modes of this same fundamental feeling, and that, in so far as he is intelligent, he also virtually understands everything that he afterwards comes to understand distinctly, through the intuition of universal being, to which the intelligible entity of all things is at last reducible.

173. Hence, if we accept as proved the simplicity and identity of the sentient and intelligent principle, in the various sensions of the first, and the various intellections of the second, the truth of our system follows at once.

If, on the contrary, starting with our system, we proceed in the opposite direction, that is, if we admit the truth of the fundamental feeling and of the intuition of being, then we can at once solve the most subtle difficulties that can be brought forward to disprove the simplicity and identity of the sentient principle; for these then become necessary consequences. And here let the wise reader reflect upon

the harmony of truth. Truths, in appearance so far apart as the identity of the sentient and intelligent principle (which no one calls in question) and the existence of the fundamental feeling and the intuition of being, agree and harmonize wonderfully with each other, mutually support each other, become proofs of each other, each being secretly contained in the other's bosom.

ARTICLE V.

The Sentient Subject and the Intelligent Subject in Man are not two Subjects, but one Subject.

174. There remains the last difficulty, which ought not to give us much trouble, after we have overcome the foregoing ones. It is this: "How can the sentient principle and the intelligent principle be a single principle in man?"

In order to answer this question, let us go back to our theory of *substance*.

175. We said that substance is that *first operative principle* of a being, from which flow its actions and passions, and, hence, its diverse states. In this principle these actions, passions, and diverse states are contained virtually, that is, they are contained in that virtue, activity, or potence of it which is their efficient cause.

We likewise said that these actions, passions, and states may be conceived in different groups, although we cannot *a priori* prove that every particular group is possible, that is, reducible to a first act, a first virtue, a first substantial principle.

176. To determine *a priori* which of these groups may be virtually comprehended in a first substantial principle would require nothing less than a complete knowledge of the intrinsic order of being.

But the intrinsic order of being is not known immediately by man; it is only gathered, little by little, from observation and experience. Hence, when observation or experience manifests to man the existence of a group of activities united in a single substantial principle, then

he is authorized to conclude that there can be such a substantial principle, because *ab esse ad posse datur consecutio.*

177. Now, internal observation is what testifies to a man that he is a single principle, sentient and intelligent at the same time. Indeed, every man can say to himself: This I who feel, am the same I who understand; and if I were not the same, I should not be able to know that I felt or to talk about my sensations.

On the other hand, there is no contradiction in maintaining that the sensitive activity and the intellective activity should have the same principle, when we reflect that from a single principle, as we said, several actions may take their origin, just as several lines do from a single point.

178. Still, it must be confessed that, after all this, there remains a very grave difficulty to be overcome.

We have said that, in order to constitute a sentient principle, there must be conceived a primitive felt, virtually comprehending all that the sentient principle can afterwards feel; and in man this primitive and fundamental felt is his own body sensible in space.

We have likewise said that, in order to constitute an intelligent principle, there must be conceived a primitive understood, virtually comprehending all that can afterwards be understood, and in man this understood is universal being.

Now, if the sentient principle is constituted by the corporeal felt, and the intelligent principle by intelligible being, we shall have to say that the corporeal extended and intelligible being are identical, or else that they constitute two different principles and not one.

179. In order to meet this most weighty objection, we must observe that in every felt there is an entity, because every act is an entity. But in the felt entity there is wanting the light of intelligence, there is wanting cognizability, as is seen from the simple fact that the phrase, *felt entity*, is not *understood entity*. Hence, when we say *felt* rather than *understood*, we exclude cognizability from

feeling. On the other hand, the intelligent has for its object *understood entity*, since the intelligent principle does nothing but understand, and every thing that it understands is necessarily an entity. It follows that the term of the sentient principle and the term of the intelligent principle are both equally *entity*. There is, therefore, identity in their terms.

180. Wherein, then, are they distinguished? They are distinguished by the different ways in which the same entity adheres to the same principle. Entity communicates itself to the sentient principle in its felt mode, which I call also *reality* or *activity*, whereas it communicates itself to the intelligent principle in its understood mode, which I call also *ideality*, *intelligibility*, *light*, &c.

Having premised thus much, we see clearly how the sentient principle and the intelligent principle may so compenetrate each other as to form one and the same principle of action, since there is the same term to both principles, although it adheres to one of these terms in one mode, and communicates itself in one form, while it adheres to the other in another mode and communicates itself in another form. The principles, therefore, are two, if we consider the form in which entity communicates itself, but they unite in one, if we consider the communicated entity itself apart from its forms. They may be called two principles, provided we recognize that in man they are not first principles, but that, above them, there is a first single principle, holding them subordinate and conjoined to itself—a first principle related to *entity* and not to the *forms of entity*, a principle which synthesizes at once in the theoretic order, manifesting itself in the form of reason, and in the practical order, revealing itself in the form of will. Hence, this intelligent principle, in so far as it is superior, is the point from which the two activities, the sensitive and the intellective, start, and is called the *rational principle*. See *Philosophical System*, no. 142, *Anthrop.*, no. 529.

CHAPTER VI.

OF THE TERMS SUBSTANCE AND SUBJECT AS APPLIED TO THE HUMAN SOUL.

181. From the arguments advanced thus far, it appears that the human soul is a *single substantial subject.*

It is a subject, because it is a first principle of actions, endowed with feeling;* and it is a substance, because this principle is conceived by the mind as existing in itself, and not in another anterior to it, in the order of feeling and understanding.

182. We must mark the difference between the terms *substance* and *substantial subject.*

The word *subject*, reserved by us to express the active principle of a feeling, designates that aspect of the soul which constitutes its most simple essence (no. 81).

The word *substance*, which designates the first act whereby the whole being subsists, embraces all that makes it subsist, and, therefore, embraces the whole feeling, both in its principle and in its term. For this reason we say with truth that the first feeling is substance, provided we look at it from the point of view of the principle, and not from that of the term, and this because the act which makes the feeling subsist is the principle of it.†

* *Anthropology*, Bk. IV., def. 4, no. 767.

† In the little work, *De Animâ*, by S. Gregory Thaumatourgos, the Saint proves that the soul is substance, because it remains identical under various modifications. He starts with this definition of substance, which readily merges in that which we have given: "Substance is that which, being one in number and the same, nevertheless receives into it contrary things," and he goes on to show that this is exactly true of the soul. We, following in the same track, have begun by showing the identity of the soul under various and contrary modifications, and then proceeded to investigate the first subject of these modifications, showing that it must be a first principle of all subsequent activities and actions, containing them all virtually, a principle in which they all have the root from which their subsistence (their first act of subsisting) springs. Hence, we have concluded that if we call this first principle *soul*,

183. From this distinction between *substance* and *substantial subject*, it is clear that nothing can be called a substantial subject but a sensitive or intellective being; whereas the term *substance* belongs also to inanimate bodies, in so far as our mind conceives them as having an act of subsistence proper to them.

the human soul has all the conditions requisite for constituting a true substance. S. Thomas recognizes that it is the characteristic of substance to act of itself—"*Nihil autem potest per se operari, nisi quod per se subsistit*," and from this principle he proves that the soul is a substance (*Sum. Theol.*, Pt. I, quæst. lxxv, art. 2). We say the same thing when we define the soul as "a first principle of action," only that we add, "in a given order of activity," so that the soul may not be confounded with God, who is the universal first principle, and we may not fall into Pantheism.

CHAPTER VII.

QUESTION OF THE INVARIABILITY OF THE SOUL AND THE CHANGES TO WHICH IT IS LIABLE.

184. Thus far, we have been investigating the internal constitution of the soul, and have reached these results:

1st. That the human soul is a single and simple principle, at once sentient and intelligent.

2nd. That this principle is an activity, virtually containing all second acts, sensions, intellections, &c.

3rd. That what determines the sphere of this activity is the *first felt* and the *first known*, that is, that felt and that known which by nature adhere to the active principle; because in this fundamental felt are virtually comprised all the sensions that come afterwards, and, in this known, the objects of all the distinct intellections that can ever occur.

Now, these doctrines suggest a question which must be treated in order to complete our reasoning in regard to the identity of the soul, viz.: Is it possible for the primitive felt or primitive understood of the human soul to change? And if so, would the soul then preserve its identity?

185. We reply, that the concept of such change involves no contradiction.

As to the identity of the soul, it is impossible to say whether it would be preserved, without distinguishing the five changes that might be conceived as taking place in the primitive felt or primitive understood. These changes are (1) Removal of the felt and understood; (2) Removal of the understood alone; (3) Removal of the felt alone; (4) Addition to, or change of, the felt; (5) Addition to the understood. Let us examine these singly.

ARTICLE I.

Removal of the Primitive Felt and Understood.

186. If the primitive felt and understood were removed, the sentient and intelligent subject would be annihilated; the soul would no longer be.

ARTICLE II.

Removal of the Understood.

187. If the primitive understood were withdrawn from the soul, the identity of the soul would cease.

The reason of this lies in the order existing between the principle of feeling and the principle of intelligence, which, in the human soul, unite to form a single principle. Their order is, that the intelligent principle is superior to the sentient, in such a way that it is the proximate origin of the common principle of understanding and feeling.

188. We come to recognize this truth, when we observe that it is only an intelligent principle that says: "I feel," since saying "I feel" is a thought which a man thinks respecting his own sensations, and thought belongs to an intelligent principle.

On the contrary, the sentient principle cannot say "I feel" or "I understand." It can say nothing at all. It can only feel.

189. It is true that, above the sensitive and intellective activities, there is a common principle which renders man conscious of his sensions and intellections and unites them together; but this principle is immediately formed by the intellective activity and is called *rational*, because it is an intellective act that forms the union between sensions and intellections. Now, if the primitive understood were removed, intelligence would cease, and, hence, the first principle of the soul would cease. But the soul, as we have seen, has its peculiar essence in this first rational principle; whence, if it were deprived of this, it would lose its

identity: it would cease to be that entity which at present we denominate the human soul.

ARTICLE III.

Removal of the Felt.

190. On the contrary, if the primitive felt were removed from it, the soul would not lose its identity, because its first principle, which constitutes its essence, would be preserved. It is true that the immediate principle of feeling would cease in it; but the intellective activity, being a superior principle, would always virtually contain the principle of feeling, although this could not be said actually to exist.

191. At the same time, the state of the soul, deprived of the fundamental corporeal feeling, would be immensely changed. All perception, all affirmation, and, hence also, all self-consciousness would be rendered impossible for the intellective principle.

Still the soul would be left with a feeling of its own; but it would no longer have any sufficient reason or any stimulus to induce it to turn back its intellective activity upon such a feeling and to perceive it; because this is the law of the human soul, that it is originally drawn to its acts by stimuli different from itself, and that only afterwards it can set itself an end, in accordance with which it operates independently of these stimuli. If, therefore, we take away from it its accidental and acquired sensions and even its fundamental corporeal feeling, it has not naturally any *real* good to which it can desire to unite itself, and which it can set itself as the end of its acts. Hence it cannot even reflect upon itself.*

* In the *New Essay*, vol. ii, nos. 612, 613, we abstained from basing the character of substance upon immutability. Substances are called immutable only relatively to accidents.

ARTICLE IV.

Addition to, or Change in, the Primitive Felt.

192. If anything were added to the primitive felt of the soul, the soul would certainly undergo a substantial change; but its first active principle, in which its essence consists, would not thereby be changed, and hence the soul would remain identical.

193. The soul, in the case supposed, preserving the whole of the primitive felt, would be able likewise to preserve the memory of itself and of its preceding state, and, hence, to be conscious of its identity.

194. But what shall we have to say, if the primitive felt, instead of being preserved, were changed into another altogether different?

In this case, I say that the soul would preserve its identity, because it would preserve intact its first principle, which is intellective; but it would not be conscious of this identity, having lost the memory of its previous state, since the memory and consciousness of this state are based upon previous perceptions, which would have ceased.

195. It might be doubted whether the abstract ideas previously formed and requiring no corporeal images, might not still remain. My opinion is, that they would not remain, except perhaps as mere aptitudes, and, even if they should remain in the depths of the soul, it would not be possible for it to contemplate them actually, except on condition that the new felt had some relation to the old, such, for example, as the law of association. The truth is that, although abstract ideas do not in themselves require any corporeal images, still they are so bound to sensations and images, or to their traces, that, when man is deprived of these, he cannot turn his attention to ideas alone, in the first place, because he has no reason to do so, and, in the second, because his attention remains without any guide to lead it to find, or to observe, them. Hence, in a man altogether deprived of sensions and images, or of traces

recalling these, abstract ideas, even supposing they could exist, would remain precisely in that state in which they are when they are not thought of, devoid of consciousness. But, as I said, it seems to me much more probable that such ideas would not remain at all in man, because they consist essentially in a relation to the real, and the real, to which to refer ideal being, would be wanting, if the new felt is supposed to have no likeness to the old, since the substance of the soul would certainly present no similarity to the preceding felt.

ARTICLE V.

Addition to the Understood.

196. We do not take into account the case of change in the primitive understood, because the primitive understood can neither be changed, being immutable in its nature, nor diminished, because the concept of ideal being is most simple; but it may be increased. Indeed, it may be increased in two ways, either by the determination of the concepts in it, or by the realization of essential being itself.

197. Concepts are positive or negative. The positive are those which are founded on a reality perceived by us.

If, in the human soul, the concepts founded upon those realities which man perceives increase, then its being is not substantially changed; but, in whatever manner these concepts increase in its understanding, they are already virtually comprised in its primitive felt and primitive understood.

If we speak of concepts referring to other realities different from those which are virtually contained in its primitive felt, these cannot in any way be given to it, unless the felt corresponding to these concepts be given; and in this case the question merges in the one treated above—the hypothesis of an increase in the primitive felt.

198. Negative concepts are those whereby man knows a being understood, not indeed through itself, but through some relation to another known being.

Now these concepts, however many of them the human soul may acquire, have no power to change it essentially.

199. The case in which the primitive understood is increased by the realization of being, the essential object is, in the highest degree, deserving of consideration because it is what enables man to pass from the natural to the supernatural, order.

Essential being, besides being the light of the mind, then also becomes felt. Now, since real being, in this case, is identical with ideal being, the principle which previously intuited ideal being, still remains identical, although it now feels the reality of being. The soul, therefore, the substantial subject, does not lose its identity, but acquires a new infinite dignity, and the intellect that intuites the former, at the same time perceives the latter.

What has been changed is, in fact, only the felt; that is, there has been added to the preceding felt, a felt essentially different and infinitely greater than the first—a felt which belongs to the intellective sense. Hence, the first principle which unites the felt and the understood, and which is the fountain of reason and will, has not changed its nature, but has infinitely increased it. The addition of activity made to it is greater and loftier than all the activity which it had before. A new principle of action has been added to it, that is, the principle of acting in a supernatural manner.

Now the principle which combines in itself all inferior activities is called *person*, because it virtually contains the supreme activity. Hence, although it preserves its identity as subject, still it becomes a new person, because it receives a new activity, far superior to that which it had before.*

* *Opuscoli Morali* (Pogliani, 1841), pp. 242 sqq.

CHAPTER VIII.

ON THE DIFFERENCE BETWEEN THE HUMAN SOUL, THE PURE INTELLIGENCES, AND THE SOULS OF BRUTES.

200. Having discovered wherein the substance of the human soul consists, and what are its principal qualities it remains for us to investigate the differences which separate it from the pure intelligences and from other natures akin to it.

The human soul, then, is that first principle of feeling and understanding, which, without ceasing to be one, or to have a single radical activity, is constituted by a corporeal and extended *sensum*, and by an understood, which is indeterminate being. We say *first principle*, because the soul is a principle superior to the sensitive principle, and virtually contains in its bosom the sensitive principle, so that the actual existence of this principle belongs to the *nature* of man indeed, but not to the *essence* of the soul. For this essence it is sufficient that the principle of animal feeling should be virtually contained in it.

201. Hence we may point out the differences which separate the human soul (1) from the pure intelligences,* and (2) from the souls of beasts.

* The belief in pure spirits, or angels, goes back to the world's most ancient memories. All oriental traditions agree in attesting it. In the earliest sacred book of the Chinese, the *Chou-King*, in which Confucius, in the year 484, B.C., collected fragments of more ancient histories and traditional precepts, frequent mention is made of spirits. In the second chapter, the Emperor *Chun*, who is said to have reigned twenty centuries before Christ, is spoken of thus: "He performed the sacrifice *Loui* to *Chang-ti*, and the ceremonies to the six *Tsong*, to the mountains, the rivers, and, in general, in honour of all the spirits."

The word *Chang-ti* is used to denote the Supreme Being, because it signifies "most worthy of respect" [τιμιώτατον] and to him alone is performed the great sacrifice *Loui*. *Tsong* is applied to the greater spirits, and means "worthy of respect" [τίμιον]; then come the minor spirits of the mountains, rivers, etc.

The human soul stands midway between the Angels and the souls of brutes.

" 202. The angels lack the corporeal felt, and, hence, are without the principle of animal feeling and animal sensions. They are not passive toward bodies; but they are active, and, instead of animal feelings, they possess the feeling of their own activities and the terms of these.

This we shall explain more fully, D.V., in the *Cosmology* or in the *Theosophy*.

203. The souls of brutes are merely principles of corporeal feeling, disjoined from intellective activity. These principles, from the simple fact that they are constituted as actualities by themselves, are first principles, and, being first activities, should be called substantial principles or substances.

CHAPTER IX.

RELATION BETWEEN THE SUBSTANCE OF THE SOUL AND HUMAN NATURE.

ARTICLE I.

The Soul is the Form of Man.

204. Hence we also see in what relation the soul of man, or the substance of the soul, stands to the whole man, *man* being taken to signify human nature.*

Man, that is, human nature, is a compound, resulting from the personal union of soul and body.

205. From this union there springs a single individual: this individual is single, because it has a single supreme principle, which virtually contains in its bosom all inferior activities, and this supreme principle is the substance of the soul.

206. The substance of the soul, being, therefore, the active principle, the principle which virtually embraces all the other activities that are in man, is wont to be called the *form* of man, the word *form* having been used from the most remote times to signify "that first virtue of a given being, whereby it is that being rather than another."

207. This truth we may corroborate by a passage from St. Thomas, in which he explains how the soul is called by the Aristotelians the act [ἐντελέχεια] of the body. "*In eo,*" he says, "*cujus anima dicitur actus, etiam anima includitur; eo modo loquendi quo calor est actus calidi, et lumen est actus lucidi; non quod seorsum sit lucidum sine luce, sed quia est*

* The word *man* is sometimes used to signify the *subject*, and in this sense man is reduced to soul, as we have remarked (no. 10). Sometimes it signifies human nature, and in this sense the soul is only the form of man, as we have explained in this chapter.

lucidum per lumen. Et similiter dicitur quod anima est actus corporis, &c., quia per animam et est corpus, et est organicum et est potentia vitam habens."*

ARTICLE II.

How the Primitive Understood is the Form of the Intelligent Principle.

208. But in man, besides the activity constituting the subject, there is something else, which does not belong to that activity, but which contributes to arouse it.

This is the primitive understood, which is not the activity of understanding, but is that which renders it possible and subsistent. Hence it is properly named the *form of intelligence*, since it adheres to the subjective principle and renders it intellective.

209. It is an extra-subjective element, the term of intelligence and properly its *object*. When we say *object*, we mean a term distinguished from the intelligent principle by the very act which is communicated to that principle. Hence it communicates itself to a subject without confounding itself therewith, or, rather, by distinguishing itself therefrom (by intuition).

ARTICLE III.

How the first Felt may be called the Form of the Sentient Principle, and how not.

210. So, likewise, the *primitive felt* is not the sentient activity; it is an extra-subjective element.

This extra-subjective element, however, has not the *relation of object* to the subject, since the sentient, as sentient, does not distinguish it from itself, but simply feels it. In fact, in no sension is the sentient principle felt in a mode distinct from its term: it is only intelligence that afterwards distinguishes them. The term of sension and its principle constitute a single feeling, and they cannot become two by

* *Sum. Theol.*, Pt. I, quæst. lxxxi, art. 4, *ad* 1.

any sensitive act, because sensitivity does not reflect upon itself, but terminates entirely in its own act. The felt, therefore, may be called the *term* of the sentient, but not its *object.*

211. Still, as the primitive understood (object) may be called the form of the intelligent, so also the felt may be called the *form of the sentient.* The understood and the felt are, in fact, the ultimate perfection, the apex, and, as we have said, the term of the act of understanding and feeling. There is, however, an immense difference between the two forms. The essential object is a necessary form, so that, even if all human minds were annihilated, it would not be annihilated, for which reason it demands and presupposes an eternal mind in which it never fails.* On the contrary, the corporeal felt is manifestly contingent and may be annihilated.

212. But we have elsewhere described the *primitive felt* as the "*matter* of the power of feeling." † We said, moreover, that *matter* is not the primitive felt, but that it is that force external to feeling which changes it. We, therefore, called it *sensiferous.*‡ Now, here it seems that we bring forward a third opinion, when we say that the *felt* is the form of the *sentient.* Are these not so many contradictions? We must reconcile ourselves with ourselves, it seems.

213. We say that in these three doctrines there is an apparent contradiction, but not a real one. And the apparent contradiction is produced by the complication of actions and passions produced within the sensitive being. The word *matter* signifies something relative, and it changes its signification when the particular terms of the relation change.

214. Let us define matter:

"Matter is an element constituting a given entity, extraneous, however, to the activity of the entity so constituted, and subsisting in virtue of said activity." ‖

* Hence the *a priori* demonstration of the existence of God given in the *New Essay*, vol. iii, nos. 1456-1460.

† *New Essay*, vol. ii, nos. 1005-1019.

‡ *Anthropology*, Bk. II, sec. i, cp. 10, nos. 247-257.

‖ In the second part of the *Psychology* we shall speak more at length of matter, and show that its very essence is to be a *term* and never a *principle*—a truth from which most important consequences follow.

215. Let us now examine the sensitive being. If we consider its sentient activity, it is clear (1) that the primitive felt is an element constituting this activity, because, without the felt, there is no act of feeling; but (2) that this element is extraneous to the activity, because the sentient, so far from being the felt, is even opposed to it; and yet (3) that it is by this activity, that is, by the act of feeling, that the felt is brought into being, because there would be no felt without the act of feeling, whereof it is, at the same time, the effect. Hence the *felt* is the matter of feeling, as was said in the *New Essay*. However, we there observed that this *matter*, as such, belongs to the first and immanent felt, and not to the felt of acquired sensations, because, in truth, the former alone, and not the latter, constitutes the sensitive being. Hence, we said that the *primitive felt* is the matter of the sensitive being, and that the *subsequent felts* (*sensa*) are terms of the *operations* of the sensitive being. Nothing, however, would hinder us from calling these accidental *sensa* the matter of the accidental sensations.

This statement is, therefore, completely true, if we consider the *power of feeling*, and not its act, that is, if we consider this act as in process of formation, and not as already formed. For it is certain that, in the formation of the primitive act of feeling, the felt does not yet exist. It exists only as soon as the act of feeling is entirely formed. Hence, in this moment, the activity is on the side of the acting principle, and the passivity on the side of the effect (the felt), which is about to be produced. The felt, therefore, considered in this moment, has the character of matter, which is, as it were, invaded by the sentient act.

216. If, on the other hand, we consider the act of feeling in the moment in which it is already formed, in which its *sensum* is not in potentiality, but itself is in act, it is certain that, at that moment, the sentient feels in virtue of the felt, simply because this felt is its last evolution and perfection, and, so to speak, its extremity. Hence, at that moment of the sensitive being in which it has put on its full nature,

the felt may be called its form, not because the felt feels, but because it is that whereby the sentient feels. It is not, therefore, the form, because the felt is the sentient activity; but it is the form, because the sentient is not called sentient until after it has produced the felt, although the activity, not yet sentient, but in process of becoming such, precedes the felt. Inasmuch, therefore, as we can distinguish two moments in the contingent sentient being, the one, when it is about to become sentient, the other when it has already become so, in the former the felt which is not yet produced, but is about to be so, corresponds to the concept of matter and of a sort of passive term; in the second, when the sentient is in its complete act, the felt corresponds to the concept of form, because this act, so to speak, dwells in it and is complete through it. The primitive felt, therefore, is the *matter* of the power of feeling not yet actualized as a power; it is the *form* of the power when actualized as a power. Although these are different aspects or views of the intelligence, still, each has a value of its own, and, unless they are kept distinct, language, which is formed upon them, becomes confused and gives rise to false concepts.

217. Now, how can what we said in the *Anthropology* be also true, viz., that *matter* is not, properly speaking, the felt, but is that brute-force, called *sensiferous*, which changes the primitive felt? There we were speaking of the distinction between *body* and *matter*, and we said that for the concept of body an extended felt was sufficient, because in the extended felt "there is force with virtue diffusive in extension," and these are the two elements which constitute the concept of body.* But we observed further, that, over and above the *felt*, there is presented in nature something as anterior to the felt, a kind of substrate to the felt itself—a force which does not go to constitute the felt, but to change it, whence we know its existence through the violence which we feel applied to us, when one felt is removed from us and replaced by another,

* *New Essay*, vol. ii, no. 871.

and also by extra-subjective perception.* To this force which, in fact, causes the felt, we give the name of *matter*, in contradistinction to the felt itself, for which we reserve the term *body* in its proper sense. We know the existence of this force, anterior to the felt and to the subjective body, only through its effect in the felt itself, by the violence with which it alters and changes the felt. Hence, the positive basis of our concept of body is the *felt;* in other words, the felt is the first thing we know concerning body, and, therefore, it is only by arguing from it that we form the first and essential concept of body. The concept of body, therefore, essentially involves its actual sensibility. But the force which withdraws or changes the felt is not itself a felt extension, and hence it has not the actuality which characterizes the concept of body. Still, though extraneous to the corporeal activity (which, according to us, consists in actual sensibility), this force is considered as an element necessary to the *material* body, and this because that force operates in every point of the felt extended, and may withdraw every point of it from our sensitive principle, just as it may likewise furnish it with another sensible extension. For this reason, the force in question is that which, before being felt as operating in the soul, produces the felt. Hence it is considered as having the possibility of being felt. It has not, therefore, the act of being felt, but is a condition prior and necessary to the felt. This is the first characteristic of matter, that it is, as we said, a constituent element of, but an element extraneous to, the activity which results from matter and

* That the material part is not an element of the *felt*, as such, can be proved from this fact that the material particles of our body may be replaced by others, without our being aware through feeling of the change, if this change takes place naturally and without any change in the felt extension. Hence it is impossible to observe the changes of particles which take place every moment in the human body, the body all the time remaining identical, and this for the reason that *the material part is not properly constitutive of the human body.* It is true that the particles which the body daily loses or gains may have, conjoined with them, minute sensations, which on account of their tenuity and number, merge in certain general feelings, for example, in that which accompanies digestion. But it is certain that, if material particles of the same species and form were substituted in an instant, as God could do, there would be no sensation whatever of the change.

form. But where is the other element? Where do we find it existing in virtue of the same activity? It is found in this, that the concept of force, producing or changing the felt, is known to us only through the felt, and all that we know of it is the relation which it holds to this. Hence, as a power is known through its act, so the force producing the felt is known only through the felt and in the felt. In this sense, it exists through the felt, since it is in it that we find this force actualized. Whence, generally, we give to this force the name of *matter*.

218. Nothing, however, prevents this force likewise from being considered in two distinct moments, (1) in the moment when, acting on the soul, it is on the way to produce the felt (at this moment it is not the matter of the felt, which does not yet exist, but rather the action of the corporeal principle, not perceived, but inferred, by man); (2) in the moment when, the felt being already produced, this force receives the concept of the potentially felt, whence it is called the matter of the felt or the *matter of body*.

ARTICLE IV.

In what Sense the Body is called the Matter of the Soul.

219. In the *compound* the soul is the form, and the body the matter, of man.

But may we also say that the body is the matter of the soul? Yes, if by *body* we mean the matter of the body, which we have just defined.

220. In order to see how this is, we must, first of all, show that, in the present state of things, we conceive body and matter as a single being displaying two different activities, the first of which consists in causing to feel without being felt, under which aspect it is called *matter* or *material body*, the second, in being immediately felt, under which aspect it is called *body*.

That these two activities belong to the same being, we learn from observing that the first activity, which is on the way to produce the felt, operates throughout the whole

extent of the felt, altering it and changing it, a circumstance which shows that matter is extended and occupies the same identical extension as the felt, and makes us conceive it as if it were the felt itself in potentiality, the body in potentiality. Now, potentiality and act belong to the same being; whence we conclude that matter and body are the same being.

221. All bodies external to our own manifest to us only material activity; but we give them the title of *body*, because we feel their force diffused in exactly the same space in which the subjective sensation, which is the immediate felt, is diffused.* Through this identity of space, we understand that the *anatomical body*, as we have called it, is identical with our *subjective body*.† Nevertheless, when in the body we consider both these activities, we give it the appellation of *material body*; thus attributing to the body, as to their subject, the material properties.

222. Having premised this, we will now explain how, in the human compound, the corporeal matter is properly called the matter of the soul.

If we compare an animate body with an inanimate one,‡ we may observe very great differences between the two. It is, therefore, certain that animation alters and modifies the body, in so far as it is an object of our external observation,—the body which we call vulgar or anatomical.

223. Aristotle drew from this the conclusion that there belongs to the animate body a certain act [ἐντελέχεια], which is wanting in the inanimate body, and in this act he places the essence of the soul. We cannot agree in this definition of the soul, which, according to us, is not an *act of the body*, but the *principle* which produces this act.‖

* *New Essay*, vol. ii, no. 842.

† *Anthropology*, Bk. II, sec. i, cp. viii-xi, nos. 135-257.

‡ If a body in which no animal phenomenon was observed, nevertheless, consisted of animal elements, each of which, from its minuteness, escaped our senses, so that what fell under them was only the compound, this would be called, and would be, an inanimate body, because the compound would be really inanimate. Hence we may admit the existence of brute bodies, whatever hypothesis we may make regarding the animation of the primitive elements.

‖ Let no one be surprised that we seem here to be departing from the

The *soul*, in a word, produces animation, but it is not animation itself.

224. Aristotle, we believe, was drawn into this error from considering only the phenomena of the vulgar and anatomical body, which are so far from being the essence of the body that they are mere signs from which we are able to infer its material activity. He never succeeded in seizing the body as given to us by the subjective feeling, in which the essence of the body consists. And that Aristotle stopped short at the mere external phenomena which the body produces on our organs, is shown by the fact that he attributed a soul to plants. Now Aristotle's vegetative soul, devoid of all feeling, is only a principle assumed to explain the extra-subjective phenomena presented to us by

opinion of St. Thomas, who maintains the Aristotelian definition, which lays down that the soul is an act of the body. Accepting as our masters all the sainted doctors of the Church, we hold it to be the duty of the friend of truth to adhere rather to the spirit than to the letter of their teaching, since in the latter we sometimes find contradictions which do not occur in the former. St. Thomas, in his time, was almost obliged to retain the doctrine of Aristotle, or, at least, to correct it with caution. The definition of the soul given by Aristotle cannot, it seems to me, be maintained. Calling the soul an *act of the body* seems to render it a production of the body, since acts are products of their subject. The simile, which he uses, of the wax and the figure impressed upon it, in order to demonstrate the union of the soul with the body (*De Anima*, II, 1, 7; 412b7), confirms the justice of this censure, since in the impressed wax there is but a single substance, the wax; and the figure is but an act, a modification of it. According to this analogy, the soul would not be substance, but a mere modification of the body. St. Thomas observed this, and, although he retained the Aristotelian definition, he did not admit the error which follows, as a consequence, from it. Hence, proposing to himself the objections: How can the intellect be an act of the body? he replies that "the human soul is the act of the organic body, in so far as the body serves it as an organ. But it is not necessary that the body should be an organ of it in respect to every one of its powers and virtues, since the soul exceeds the proportions of the body" (*De Anima*, Bk. II, *ad* 2). A part of the human soul, therefore, and that the principal one, is not an act of the body, and hence the Aristotelian definition does not express its whole essence, as a good definition ought to do, since, if the essence of the human soul were only an act of the body, the intellect would not be soul, would not belong to the essence of the soul, inasmuch as it does not make use of any bodily organ. This invincible objection did not escape the perspicacity of the Angel of the Schools, who, however, does not meet it, but contents himself with rescuing the most important truth, replying simply: "The possible intellect follows the concept of the human soul, in as far as this rises above the bodily matter. Hence, although it is not the act of any organ, it does not entirely go beyond the essence of the soul, but is the supreme part of it" (*Quæs. de Anima*, art. ii, *ad* 4). In giving up the Aristotelian definition, therefore, I believe I am adhering substantially to the doctrine of St. Thomas. I am all the more constrained to do this, when I consider that intelligence is not a mere potence of the human soul, but *a part of its essence*, a substantial and specific part of it.

plants, with their organization, nutrition, growth, generation, and germination. But, as there is nothing subjective in all this, and no feeling is attributed to plants, they lack that substantial subject to which alone the name of soul properly belongs.* Wherever this subjective or sensitive principle is found, as in animals, there likewise are found animation and soul. But is animation the effect of the soul acting upon the body, or of the body acting upon the soul,—or is it the effect of the mutual action of soul and body?

We have already declared our opinion. We have said that the material body has in itself no virtue to act upon the soul, but that the soul is what first modifies it and draws it to a new act, whereby it is possible for it to act upon the soul and produce feeling in it. And Aristotle himself, as well as his innumerable followers, recognizes this.†

Now this first modification, which the body receives from the soul and by which it is placed in a condition to produce feeling, is properly what constitutes animation, and this animation is what renders it capable of producing the extra-subjective phenomena which belong to animate bodies, and also to produce feeling in the soul. Just in proportion, therefore, as it receives this act of animation from the soul, does it become matter for the operation of the soul itself.

* In order that plants should be animated, they ought to have a sensitive principle governing their operations. If this principle were not sensitive, and had only an extra-subjective existence, it would never be able to constitute a true substantial subject, such as the soul must be. There have been philosophers who, besides crediting the plants with a soul, have attributed indivisibility to this soul, wherein, indeed, they were consistent. Among these are Nemesius (*De Animâ Hominis*, cap. ii), Marsilius Ficinus (*De Theolog. Platonis*, Bk. I, cpp. vi-viii), Pomponazzi (*De Nutriente et Nutrito*, Bk. I, cp. x). Those Syrians mentioned by Gennadius, who distinguished two souls in man, the one *sensitive*, having its seat in the blood, and the other *intellective*, appear to have recognized that there was not a third or *vegetable* soul. Gennadius (A.D. 470) says: "*Neque duas esse animas dicimus in uno homine, sicut Jacobus et alii Syrorum scribunt, unam animalem, qua animetur corpus et immixta sit sanguini, et alteram spiritalem, quæ rationem ministret; sed dicimus unam eamdemque esse animam in homine, quæ et corpus sui societatè vivificet et semetipsam sua ratione disponat*" (*De Eccles. Dogmat.*, cp. xiii).

† The text of Aristotle (ἔστι δὲ οὐ τὸ ἀποβεβληκὸς τὴν ψυχὴν τὸ δυνάμει ὂν ὥστε ζῆν, ἀλλὰ τὸ ἔχον. *De Anima*, II, 1, 10; 412, b. 25) means plainly that the soul is what imparts to the body even the aptitude for animation.

225: Nevertheless, it remains to be shown that the animation of the body is originally an act of the soul on the body, and not an act of the body on the soul.

In order to show this, we must observe that continuous extension, at least of a subjective kind, is essential to body, and that continuous extension cannot exist save in an unextended principle.* In fact, all the modes of conceiving the extension of body are reducible to two, as are likewise the concepts which man forms of it—I mean, the concept of material and extra-subjective extension and the concept of corporeal and subjective extension. The concept of extra-subjective extension is that of a force altering the felt; the concept of subjective extension is that of the felt itself, of which extension is the mode. The former of the two concepts, therefore, is reducible to the latter, so that, analysing all that we know with regard to the extension of body, we are enabled to infer that the essence of extension is merely the *mode of the* corporeal, fundamental *felt*.† But the fundamental felt is the animate

* *Anthropology*, Bk. II, sec. i, chap. vii, art. 1, nos. 94-103. The ancients had a glimpse of this great truth; but they expressed it in other words. For example, they said that the body requires something simple to hold it together. This way of conceiving the body, as contained in the simplicity of the soul, we find in Nemesius, who attributes it to the most ancient masters. Here is the passage in question: "*Contra omnes qui dicunt animam esse corpus, illa sufficient, quæ ab Ammonio, doctore Plotini, et Numenio Pythagoræo disputata sunt. Sunt autem haec: corpora, quæ suâ naturâ mutantur, penitusque dissipantur, et infinite dividuntur, si in iis nihil quod sit immutabile relinquatur, opus habent* ALIQUO SE CONTINENTE *et connectente, et velut constringente et cohibente, quod animam dicimus. Itaque, si corpus est anima, qualecumque tandem etiam tenuissimum, quid sursus erit, quod* IPSUM CONTINEAT? *'Ostensum est enim omne corpus indigere aliquo* A QUO CONTINEATUR, *et ita infinite, donec ad aliquid, quod corpore vacet, perveniamus* (De Nat. Hominis, chap. ii). This passage becomes quite clear and cogent, when one fully understands what we have already shown, (1) that the continuous is necessary to body, and (2) that the continuous extended must have its seat in the soul, an unextended principle.

† Here it seems opportune to call to mind the famous question discussed by the Schoolmen, as to whether the soul informs *bare matter* or *matter having the form of corporeity*. According to our theory, the soul informs the bare matter, and hence there is truth in the position of Suarez, who follows many others, that the soul gives to matter the *grade of corporeity*, although in a different sense. The same opinion was likewise held by St. Thomas, who, after having shown that in every species there can be but one *substantial form*, writes: "Thus, therefore, inasmuch as the soul is a substantial form, in that it constitutes man as a determinate kind of substance, there is no other substantial form intermediate between the soul and *first matter*; but man becomes perfected by the rational soul according to the different degrees of perfection, so that he is *body*, and *animate body* and *rational*

body. It is, therefore, by an action of the soul that the body becomes animate, since the soul is what gives it *subjective extension,* with which are connected all the extra-subjective phenomena of bodies termed animate.*

ARTICLE V.

In what Sense the Soul is called the Form of the Body.

226. If the body is the matter of the soul in the compound, it follows that the soul is the form of the body, or what gives it animation, the act whereby it lives. This act, as we have seen, consists in becoming subjectively extended, that is, in being felt in the fundamental feeling as extended, to which first and essential characteristic of animation are constantly joined the extra-subjective phenomena, which are *signs* of animation, not animation itself.

But here arises the doubt whether the form of the body is the intellective soul, or only the sensitive one.

227. To this we reply that in man there is but one soul and that it is *rational.* Hence, this *rational soul* is the form of the body.†

animal" (*De Anima,* A ix, *in corp.*). Now, this thesis, that *first matter* receives from the soul even its corporeity, and not merely its animation, is considered by St. Thomas as highly important, because it paves the way for the demonstration that the soul, according to its essence, is in all parts of the body, as well as for other theses of great moment. But it does not seem to me to receive a full demonstration, until we come to see how the concept of body, when considered in its origin, becomes identical with that of *felt,* and the *felt* involves an essential relation to the sentient. Then, indeed, it is clearly proved that even the form of corporeity is due to the soul. But I do not see that the Schoolmen clearly saw or pointed out this truth, of which, nevertheless, they felt the need. I do not find that they pointed out the nature of subjective extension, which becomes the proper form of the body. Any one wishing to follow up the scholastic controversy may consult Father Suarez, *Metaphysicarum Disputat,* D. xv, sec. x, n. viii-xv; D. xiii, lect. iii; *Tract. de Animâ,* Bk. I, chap. ii.

* It is worthy of observation that, as the sentient principle, which in brutes is the soul, does not exist without the felt, nor the felt without it, the word *soul* came to be used by the ancients to mean that which results from the contact of the two elements distinguished by the mind in the compound, but not existing separately. Hence, the word was used to indicate sometimes the *animating sensitive principle,* the cause of the life of the body, and sometimes the *life* itself of the body, in which sense it is Aristotle's *actus corporis* [ἐντελέχεια σώματος].

† In the Council of Vienne held under Clement V (A.D. 1311), it was defined: "*Doctrinam omnem, seu positionem temere asserentem aut vertentem in*

228. I have said *rational soul*, rather than *intellective soul* (although the words *intellective* and *rational* are frequently used indiscriminately), because, as we have seen, the intellective principle and the sentient principle in man depend upon another principle which unifies them as the principle of both, and thus constitutes the substantial human subject (no. 180). Now, this first principle (in which the substance of the soul consists) is with greater propriety called *rational*,* according to the definition which we have given of reason, since it is "that faculty which unites the sensible and the intelligible, affirming that which it feels, by means of the idea, and acting according to what it affirms."

229. Still, this first, rational principle is not all immersed in matter, according to the scholastic expression, † but only in so far as it is a principle of activity perceiving the body and yet remaining, in its purely intellectual activity, free from matter. The truth is, the mere intellective act, like the intuition of *being*, receives nothing from the corporeal feeling; and, as for the operations of reason, they receive from sensation the material upon which they work, while the form of these operations is altogether immaterial.

dubium quod substantia animæ rationalis seu intellectivae, vere, ac per se humani corporis non sit forma, ut erroneam et veritati catholicæ inimicam prædicto approbante Concilio, reprobamus" (Clement, Bk. I, tit. i). This doctrine was confirmed in the eighth session of the Lateran Council held under Leo X.

* Hence St. Thomas writes: "*Licet anima sit forma corporis* SECUNDUM ESSENTIAM *animæ intellectualis, non tamen* SECUNDUM OPERATIONEM *intellectualem* (*Quæst. de Anima*, art. 9, *ad* 11).

† St. Gregory, of Nyssa (A.D. 380), writes thus: "*Vera et perfecta anima se ipsâ unica quidem est, intelligens, nulla ex materiâ crassâ constans, sed* PER SENSUS *naturae illae crassae mixta* (De Hominis Opificio, chap. xiv). Feeling is the effect, term, complement of animation, and, therefore, animation may be attributed to the soul, in so far as it is sensitive. But in this same animation, which is completed in the *sensitive* (*sensoria*) *life*, it produces also the *organic life*, as we have explained in the *Anthropology*, Bk. II, sec. ii, nos. 367-498, to which we refer the reader. That even in man organic life must be attributed to the soul, has been the constant opinion of ecclesiastical writers. I will cite only Joannes Damascenus, who writes thus: "The soul is a substance, living, simple, free from body, naturally invisible to bodily eyes, immortal, partaking of reason and intelligence, without figure, using a bodily instrument, and imparting to it *life, growth, sense, faculty of generation*, containing a mind undivided from it (since the mind is nothing else but the *pure part of the soul*, bearing to it the same relation as the eye does to the body), endowed with free-will and the faculty of willing and acting, changeable, as created things are, that is, subject to the changes of the will" (*On the Orthodox Faith*, Bk. II, chap. xii).

230. For this reason, the ancients distinguished the *soul* from the *spirit* or from the *animus*, confining the term *soul* to the direct principle of the animation of the body, which is the sensitive principle, and giving the name of spirit to the substance itself, in so far as it is free from bodily contact.*

Moreover, they were wont to say that beasts had only an *anima* (soul), but that man had, besides, an *animus*.†

* Hugo de St. Victor writes: "*Unus et idem spiritus et* AD SE IPSUM SPIRITUS *dicitur, et* AD CORPUS, ANIMA. *Ideo anima humana, quia et esse in corpore habet, et* EXTRA CORPUS, ANIMA *vocatur et* SPIRITUS. *Anima dicitur in quantum est vita corporis; spiritus autem in quantum est ratione praedita substantia spiritalis. In qua vita Anima penditur, ut* SPIRITUS *salvus fiat*" (Tract. super Magnif.).

† Seneca says: "*Animantia quemadmodum divido? Ut dicam, quædam* ANIMUM *habent, quædam tantum* ANIMAM," Ep. lviii. Juvenal, likewise, says: "*Indulsit communis conditor illis Tantum* ANIMAS, *nobis* ANIMUM *quoque*" (Sat. xv, 148 sq.).

CHAPTER X.

ON THE REALITY OF THE SOUL.

231. All contingent and limited things have this peculiarity, that their nature consists in *reality*, so that the ideal does not go to constitute their nature as an element, but only renders them beings cognizable to the understanding.*

It is only the necessary and absolute being that has a nature, such that its complete reality necessarily lies in the bosom of ideality, and *vice versâ*. Hence, both real being and ideal being belong to the nature and constitution of the Infinite Being.

Now, that the substance of the soul, like that of every contingent being, is not constituted by ideal being, is a truth most worthy of attention and one not easily seized. The difficulties are two:

1st. We do not know our souls, or the souls of others, or any contingent being, without the aid of ideal being; hence ideal being seems to be mingled up with the soul and all contingent things.

2nd. The soul is intellective only through the intuition of ideal being, whence ideal being seems to belong to its nature.

232. We may overcome the first of these difficulties by observing that, while it is most true that we cannot perceive our own souls (from the perception of which we derive the concept of every other soul), without making use of ideal being, it is likewise true that, in order to

* This agrees with what we have often said, to the effect that the nature of contingent things is not to be found in *being*, unless man has some feeling of them, that is, unless he has perceived their reality or some *real* similitude of them (no. 195).

understand what the soul is purely in its own nature, without any heterogeneous adjunct, we must from the percept of the soul substract the perception, and hence the means whereby we perceive it, which is ideal being (nos. 69, 70).

233. To the second difficulty I reply that, while it is most true that the soul is intellective through the intuition of being, it does not follow that ideal being is an intrinsic element of its nature. And this is proved:

1st. By recourse to our consciousness of ourselves, which is the principle of the science of the soul and the criterion enabling us to distinguish the false from the true in this matter. Now we are perfectly aware, and see clearly, that we are not ideal being, because ideal being is a universal and I am a particular; ideal being is unmodifiable and I am subject to modifications; ideal being is the common means whereby all men know, and I am not in other men, but exclusively in myself, and other men do not use me, in order to know: on the contrary, they perform their acts of cognition, notwithstanding that they have no knowledge of me or even of my existence.

2nd. Since ideal being is united to the *subject* by way of intuition, it is clear that it is not the subject, because intuition has this characteristic, that it distinguishes its term from itself, excludes it from itself, places it as something opposed to itself—whence the term *objectum*.

In order to arrive at greater clearness in this matter, I refer the reader to those passages in which I have shown that there is no absurdity in saying that one thing exists in another without commingling with that other, or in saying that this really happens in the union of ideal being with the subject through intuition.*

234. It may be replied: You say too that the act of

* *Restoration*, &c., Bk. III, chap. xlvii. The Platonists saw the intimate union of ideas with the soul; but they exaggerated it, because (1) they spoke of a certain continuity between them and souls, and (2) afterwards took ideas themselves for so many souls. Jamblichos writes: "Unitas ipsa Deorum (these Gods are the ideas) unit sibi animas ab æterno per unitates eorum secundum contiguitatem tam propriam et efficacem ut esse *continuitas* videatur." *De Mysteriis*, I.

intuition is created by virtue of the manifestation of being; hence the very act of intuition is an effect of being. I reply: What does that matter? Granted that intuition and the intuiting [subject] are the effect of the manifestation of ideal being, it does not follow that they are an act of this same ideal being, the truth being that they are the opposite pole of it. The cause is not the effect. How this *manifestation* takes place, how this manifestation comes to be a sort of *creation*, I do not now inquire. The question is one of another order, much more sublime than the one we are now dealing with. I am content with maintaining the fact, that the intuited is not the intuiting, or the soul; and the fact is evident.

CHAPTER XI.

OF THE FINITUDE AND INFINITUDE OF THE HUMAN SOUL.

235. Now, knowing that ideal being is not an internal element, constituting the nature of the soul, but that this nature is purely real, we easily draw the conclusion that the human soul is a finite being. The reason is that we do not find the infinite in man without recurring to ideal being, which, as we have said, is not a part of man himself.

236. And this truth is also furnished us immediately through our consciousness of ourselves. Everyone of us knows that he is finite, and when he says *I*, he is aware that he is affirming a reality which excludes innumerable other realities of the same and of different nature, and, hence, that he is affirming a finite thing.

237. At the same time, the human soul, in so far as it is intellective, is united to an infinite being, the idea, and, in this respect, partakes of a certain infinitude. We may, in fact, compare the relation of ideal being to the mind to the relation which an infinite space all equally illuminated would hold to the eye. Hence, although the reals known to man are always finite, because the real which perceives them, that is, the soul, is finite, yet the *means of knowing* the real perceived through sense, that is, the idea of being, is never exhausted or rendered ineffectual; it is always sufficient for the cognition of other reals, if they were given to man in sensitive perception, and that too indefinitely,—yea, even if the reality were infinite.* Hence St. Thomas says: "In that manner wherein our intellect is infinite in virtue, in that same it knows the infinite.

* *Theodicy*, nos. 145-151.

For the virtue is infinite, in that it is not determined by corporeal matter (we should say "by any finite reality") and is cognitive of the universal (ideal being) which is abstracted from individual (subsistent) matter. Therefore it is not limited to any individual, but in itself extends to infinite individuals. *

238. Now, here an objection presents itself. Ideal being is the form of the intellective soul; but form and matter are two elements constituting one nature; hence, ideal being is a true constitutive element of the soul. But ideal being, as ideal, is infinite; hence, the human soul is composed of finite and infinite.

I reply by distinguishing the minor premise of this proposition in this way. Forms are of two kinds, subjective and objective. Subjective forms belong to the subject and constitute it; objective forms neither belong to the subject nor constitute it, but draw the subject into act, and hence may also be called *immediate causes of the form* of the subject. Still, with equal, or even greater, propriety, they are called forms, when they are considered as the term of the act of intuition; for universal being, in so far as it is the term of this act, is, as it were, appropriated to the soul without ceasing to be universal in itself.† And, in fact, although it is true that universal being is intuited as identically the same by all intellects, yet, in so far as it is merely the term of one intellect; it is not the term of another, and it is in this sense that the truth possessed by man may be said to be created; this proposition, "The truth of the human intellect is created," being understood to be equivalent to this other, "That truth which is eternal has been made to become the term of a created intellect." ‡

239. In all this it must be remembered that every action which terminates in an entity different from itself supposes a species of contact with that entity, and at the

* *Sum. Theol.*, Pt. I, quæst. lxxxvi, art. ij, and quæst. lxxix, art. iv *ad 1.*

† Thus is solved the objection which might be raised against the designation *form* which we have applied to ideal being, on the principle that "*Impossibile est plurium numero diversorum esse unam formam.* See St. Thomas, *Sum. Theol.*, Pt. I, quæst. lxxvi, art. ij.

‡ St. Thomas speaks of created truth, *Sum. Theol.*, Pt. I, quæst. xvi, art. vij, viij.

point of contact there is communication between the thing touching and the thing touched. But, in the case of intuition, the thing touched, ideal being, is not mutable, alterable, or capable of being mixed with anything else;* hence communication introduces no variety into it, but only into the subject. The variety which occurs in the subject consists in this, that it is put in possession of intelligence, or of light, and what is possessed does not confound itself with the possessor, although it enriches the same. Thus, the possessor of gold is not gold. In so far, therefore, as ideal being is a light to the intuiting subject, in so far it is its form; but it does not, on that account, suffer any change or restriction in itself.

240. And here the question would not be out of place, whether the intelligible is communicated to human nature with or without limit, and, if with limit, wherein this limitation consists.

To this we will reply briefly thus: The intelligible is eternal and necessary being: eternal and necessary being is that wherein essence and subsistence are not disjoined, but form a single, most simple being. Now, essence shines forth in the idea, is the intelligible; if, therefore, man with his intellect saw the intelligible fully, he would see God, whose essence is subsistence itself. Hence the intelligible cannot manifest itself in all its fulness to any created being, unless this being be transported into a supernatural order and see the Creator. Indeed, God is above created nature: He is even the *only* truly supernatural being, and immediate communication with the Divine subsistence is what forms the supernatural condition of intelligent creatures.

241. But might any subject see the intelligible in a more perfect mode than that in which it is seen by man, without receiving the perception of the divine subsistence?

This important question we cannot pass by.

The intuition of being may be considered from the

* *Restoration*, &c., Bk. III, chap. xxxix-liii.

side of the intuiting subject or from that of the intuited object.

From the side of the intuiting subject, intuition may be, or appear, more or less perfect, and it seems that this perfection may vary in three modes, (1) through the *intensity* of the act, whereby it happens that ideal being produces in the subject a deeper impression, shows more light, is seen more distinctly; (2) through greater *facility* of reflection on the idea and on the intuition, which is properly a perfection of the reflecting faculty, not of the intuition; but man, being thus rendered more easily and perfectly conscious of the intuition, seems to feel that light is added to it: nevertheless, the intensity of the *intuition* contributes to facilitate reflection; (3) through increased facility in *applying* the idea, whence perception and reasoning become more rapid and perfect; and here also the perfection lies in the operations of reason, not in intuition, although the contrary seems to be the case. This perfection of reasoning is aided in no small degree by the two preceding perfections of *intuition* and *reflection*, and depends, in very large measure, on the perfect organization of the cerebro-spinal system. These differences ought to be developed in a treatise on the diversity of mental gifts.

242. The question remains to be solved as viewed from the side of the object itself. It then takes this form: Can there be given to any subject to intuite more of the intelligible than is given to human nature, without the perception of the divine subsistence being given to it?

We reply in the negative; and we justify our reply thus:

No subsistence, other than the divine, is intelligible in itself, and this is so because the intelligible is the essence of being, and only the divine subsistence is identical with that essence.* Hence it belongs to God alone, among subsistent beings, to be in Himself intelligible. Nothing, therefore, can be added to ideal being, that shall be in-

* *Restoration*, &c., Bk. III, chap. xxxix-liii.

telligible *per se*, without passing into a supernatural and divine order.

It may be said: Ideal being, as intuited by man, is altogether indeterminate. Now, it might contain many determinations of its own, without requiring God to determine it. In fact, the ideas of contingent beings are so many determinations of ideal being. Therefore, the ideal being given to intuition might in other minds be more perfect, because more determinate, than it is in the human mind.

This is an illusion, due to not understanding properly how these determinations, these special and generic ideas, arise. They arise through the *relation* of real and subsistent beings to universal indeterminate being; therefore, they are not properly ideas, but relations of subsistences, or of their vestiges, to ideal being. They, therefore, suppose subsistences as known in some way. But contingent subsistences are not intelligible in themselves, and, therefore, they add nothing to the intelligible. Through them, therefore, nothing is added that regards the intelligible. They merely give occasion to new acts on the part of the intelligent subject. The increase of cognition comes all from the side of the matter, and not from the side of the form; all from the side of the subject, not from the side of the object.

243. Intelligence, therefore, may be increased and reinforced without any increase of the intelligible *per se*. It increases every time that there is given to it to perceive a larger abundance of subsistences or realities. Intelligences, therefore, which are restricted to the natural order, cannot differ in the smaller or larger quantity of the intelligible placed before their intuition, but only in the smaller or larger quantity of reality perceived, or in a reality of a different nature. That which can increase, decrease, or vary, falls within the sphere of feeling: it is not the object of intuition itself. And thus we said that the angelic nature * differs from the human in the different

* See note to no. 751.

and better adjusted feeling with which it is endowed, and consequently, in the different nature and quantity of the things naturally perceived; but they do not differ through intuition (*Theodicy*, nos. 750, 751).

244. But is it not possible to have the ideas of contingent things without having first perceived them? Have we not, ourselves, many ideas to which we have no corresponding perceptions? May not things be known through their similitudes, without our having felt their action in ourselves?

An appeal is here made to the experience of what takes place in man. Excellent; still we must not arbitrarily imagine what happens; but patiently observe it. This is the only way to avoid falling into error.

Now, beyond doubt, what happens in man, according to the most accurate observation, is, that he has no *positive* idea of any subsistent thing, which is not preceded by a perception to which he can refer it. Thus, the blind man has no positive idea of colours, because the word *colour* does not mean to him what it means to other men, and even the word itself he would not have invented, if he had not heard it with his ears or perceived it from other men. It is true that what a man has perceived in his feeling remains with him, even when the perception is past; but this happens because the perception does not altogether pass, because he has preserved the traces of it in his imagination, and can awake the image of it—an image which is merely a kind of interior perception, a revival of the external perception.* But, if the perception had passed in such a way as to leave no trace in the imagination or habit [ἕξις], the very idea of the thing would be extinguished, because there would no longer remain any way of referring being to feeling, in which reference the idea itself, in so far as it is determinate, consists. This is what happens in man: let us see if in another being anything different could take place.

245. It is said that an intelligence may know things by

* *Anthropology*, Bk. II, sec. i, chap. xvi, nos. 350-354.

means of their *similitudes*. But this is not true except in a certain sense, which may be defined. In order that a similitude may be capable of making me know the thing represented, I must be able to compare the two; I must clearly bring out wherein they are alike, and wherein they differ. Otherwise I should not know that the similitude was a similitude, and not the thing itself. Now, how am I to make this comparison, unless I know the subsistent thing, since a comparison cannot be made without terms to compare? Hence I cannot know the subsistent thing by means of a similitude, unless I suppose that the subsistent thing is known to me beforehand. But the subsistent thing (speaking of contingent things) is not known to me by itself, but through the perception of it. Therefore, the mere similitude of the thing is not enough to enable me to know the subsistent thing. I must have the perception to which it refers.*

246. But might we not know a given thing through its similitude, without having first perceived it, if another being should reveal to us that this was its similitude?

I reply:

1.° In this case, the thing would not be known through its similitude alone, but by the further aid of the revelation given by another being, which revelation presupposes some perception.

2.° If the similitude were merely a vestige of the thing, it would only give a negative idea, that is, it would produce the persuasion that the thing existed, without letting us know its nature.

3.° If the similitude were a true one, it would have to be such that we should perceive the nature of the thing by means of it, and, hence, it would have to be a reality of the same nature as the thing in question, in so far as it was similar to that thing. For example, if a portrait enables me to know the physiognomy of a man, it is because I perceive in it the same colouring, and the same forms that belong to the man's countenance. Hence I perceive

* *New Essay*, Vol. I, nos. 104-108.

a reality which has the same characteristics; but in so fa as the portrait differs from the man, in lacking solid ex tension, flexibility of muscle, &c., I do not perceive th man by means of it, because in that which it lacks of like ness there is no similitude.

Now, here let us observe carefully wherein our questio consists. We asked whether there could be any *positiv idea* of a thing, without any perception of that thing, an we replied, No. But this necessity of perception does no extend to all like or similar individuals. It is enough tha one of these be perceived. This satisfies the conditio laid down by us as necessary in order to give the positiv idea of all individuals similar to the one perceived. Hence when we perceive one individual of a species, we know also the others, through the similitude or likeness whic they have to it. But what we maintain is, that, if we d not perceive one, we cannot know the others, because w lack the first similitude. If, on the other hand, a per ception is given to us, we certainly have the similitude o the other individuals perceptible in the same manner, an thus we know them by similitude, without perceiving them Hence it remains strictly true that no reality is know without perception, and that there can be no similitudes o real things, unless their reality is perceived. Hence supposing that to an intelligent subject there be give similitudes capable of imparting to it the knowledge o real things, we are, *ipso facto*, supposing that interna perceptions of real things are given to it. But the per ceptions of real things, that is, perceived feelings, in what ever way they are acquired or communicated, do not unless the things in question are contingent, at all increas the intelligible, the object of intuition. Hence, the in telligible cannot be increased, in whatever way we ma unite to it determinations or concepts of contingent an finite things; but it may certainly be increased in one wa by the perception of God Himself, because the divine sub sistence, as we have said, alone among all subsistences, i intelligible in itself. Hence it follows that different in

telligences may be distinguished, not by any diversity in the *ideal* being which informs them, but by a diversity in the real being which constitutes them, to which is given a different range of perceptions, whether native, or adventitious and acquired by accidental acts.

And here we close this second book of the *Psychology*.

BOOK III.

ON THE UNION OF SOUL AND BODY AND THEIR RECIPROCAL INFLUENCE.

247. Recapitulating what we have said thus far of the essence of the soul: we have seen that it resides in that primitive and substantial feeling which every man expresses when he pronounces the word *I* (nos. 69, 70), and that it is only by meditating upon this feeling that we can know with certainty the properties of the essence of the soul. For this reason it was declared by us to be the *principle* and *criterion* of all psychological theories.

We have, in consequence, examined this internal feeling, and it has testified to us that the soul is one in every man; that it is the principle of all the operations of the human individual; that it is simple and incorporeal, and that it does not die. Indeed, the word *death* means only that passion [πάθος] which the body undergoes when the soul ceases to animate it. And the soul is active in the very death of the body, being the active cause of it, in that the soul ceases from that act of its own, which is called animation.

When we arrived at this point, we were met by the subtle question of the soul's identity, against which there seemed to militate a triple multiplicity, lying in the nature of the soul. In the first place, we observe in it a principle and a term; secondly, a plurality of terms, and along with these, many operations; finally, two active principles of widely different character, sensitivity and intelligence.

Now we proved that the term is not an intrinsic element of the soul, but only one of its conditions or essential relations, for which reason it imparts no doubleness to it. For the same reason the multiplicity of terms does not fall within the soul, which is a single principle. Moreover, even the various operations of the soul do not multiply it, inasmuch as they are not the soul itself. Finally, we saw that, above the two active principles which appear in the soul, there is one which rules them, and that in this one the identity of the soul dwells, as in its own peculiar seat, because this superior principle is the soul itself.

Afterwards, we passed on to inquire what variations the soul might undergo, without losing its identity, and what it could not, and this afforded us an excellent opportunity for treating of the differences which separate the human soul, on the one hand, from the souls of brutes, and, on the other, from the pure intelligences.

We then showed that it is the nature of the soul (as of every contingent thing) to be purely real, and that, for this reason, its essence cannot be conceived positively without the perception of its reality, or some mark of the same, to refer it to. It is known by means of a *concept*, which is determined, and, so to speak, designed, in ideal being by the act of the mind which considers the relation between the ideal and the real.

Finally, we proved that the soul is finite, simply because it is real, and in so far as it is real, but that it communicates with the infinite, inasmuch as it has *being* for its object, which being is like an interminable space, in which it can extend itself without limit, and flap its wings.

248. In the reality of the soul, therefore, lie its nature and its limitation (whence also we placed it in feeling, which is nothing more or less than the real).* Now we must stop and investigate and analyse more completely this limitation. To this end, we must consider the

* When we say that the essence of the soul consists in feeling, we always mean, in feeling considered in itself, as possible.

soul in relation to the body which it animates, because the extended and corporeal reality is properly that which limits it and contributes at the same time to its operations. In the present book, therefore, we shall devote our attention to the nexus between the body and the soul, and their mutual influence.

CHAPTER I.

THE UNION OF THE SENSITIVE SOUL WITH THE BODY TAKES PLACE BY MEANS OF FEELING.

249. That, among the things different from the soul, the body is the only reality capable of being felt and perceived by man, is a fact which we learn from consciousness, and which, therefore, requires no other proof but this immediate one.

Hence we may derive an immediate and most important corollary, which is, that the soul and the body are united by means of feeling.

250. And since it is precisely in feeling that we have placed reality, it follows that between soul and body there is real conjunction.

We must not, however, imagine this conjunction as similar to that which one body has with another, when it acts upon it, and in which the action of the one is similar to the action of the other, the passion of the one similar to the passion of the other, the reaction of the one similar to the reaction of the other (whence came the erroneous principle that "action is equal to reaction"),* and, hence, the touch of the one similar to the touch of the other. In the present case we are dealing with two things of diverse nature, each of which acts upon the other in its own mode, that is, in a different mode, suffers in a different mode, and reacts in a different mode. Now, the evident fact which shows the union of soul and body is *feeling*, from which are excluded all the mechanical laws that are valid for the mutual action of bodies. For this reason we have called

* *Restoration*, &c., Bk. III, chap. xlvii.

this union and mutual action of soul and body a *relation of sensility*, and have treated at some length of its nature and laws.*

251. We have likewise shown that in every corporeal feeling there are, as it were, two extremes, which we called the *sentient* and the *felt*, and that the sentient is the soul, and the felt, the body. Now out of the sentient and the felt there is formed a single feeling, which, in so far as it is primitive and fundamental, is a single being, containing no distinctions. Whence it follows, not only that the body must be united to the soul, and the soul to the body, but that this union must be the same as that which exists between form and matter.

252. Hence, further, we refuted directly the hypotheses of pre-established harmony and occasional causes, by means of this most cogent argument, that, if either of them were true, we could have no knowledge of our bodies, because everyone of our cognitions of the body reduces itself to a knowledge that the body is the term of the feeling of the soul, and there is, therefore, involved, as essential, in the very notion of body, a relation of union with the soul and of real action between the two principles. We found, in fact, physical influx in the very definitions of soul and body;† so that, without this real union, this physical influx, neither soul nor body could be conceived or named.

253. However, we must not forget that, though the animal is a single feeling, this feeling contains a simple principle (the sentient) and an extended term (the felt). These two elements form one and the same feeling; whence the body, which is the term of feeling, is not given to the animal in its first state so isolated from the sentient principle as to be by itself a separate feeling; but there is merely a feeling of such a kind that, under one aspect, it is sentient, under another, felt. This felt is then divided by the operation of the intelligence from the sentient, as we shall afterwards explain.

* *Anthropology*, Bk. II, sec. i, chap. ix, nos. 230-245.

† *New Essay*, Vol. II, nos. 998-1002.

CHAPTER II.

THE UNION OF THE RATIONAL SOUL WITH THE BODY TAKES PLACE THROUGH AN IMMANENT PERCEPTION OF THE ANIMAL FEELING.

254. But, although we may clearly understand how the animal is an indivisible feeling, in which the sentient principle, or the soul, forms one thing with the felt term or the body, and so is the form of it, it is not equally easy to explain how the human soul, as rational, is the form of the human body.

How then does the rational soul communicate with the human body? How does it inform it?

ARTICLE I.

The Rational Activity includes the Sensitive Activity.

255. From what has already been said we may, in large part, obtain an answer to this question. It has been shown that the rational soul is a principle virtually including the sensitive corporeal principle.

And St. Thomas had written that "the intellective soul virtually contains all that is possessed by the sensitive soul of the brutes and the vegetative soul of the plants," and used, in order to explain his concept, a very apt simile. "As a surface having a pentagonal figure," he says, "is not such by reason of another tetragonal figure or another pentagonal figure besides itself, since it would be superfluous to recur to another figure of four sides, which is already contained in that of five sides, so, likewise, Sokratês is not a man by one soul and an animal by

another, but he is both by one and the same soul."* Hence he likewise affirms that "the rational soul, though a second essence, is still, by reason of its perfection, manifold in virtue."†

Still it cannot be denied that this is hard to understand, and, therefore, in order the better to explain it, we will add some other considerations to those already advanced.

ARTICLE II.

The Rational Activity contains the Sensitive Activity in a Mode of its own.

256. And, first of all, we must divest ourselves of the prejudice that things are exactly and absolutely as they appear to our outward senses, and, generally, that the things perceived by sense have no entity besides that which is perceived in a given feeling.

257. It is true that, if there is a stable mode of feeling, and, especially, if there is a single mode of feeling, or if attention is devoted exclusively to a single mode, the thing, as it is perceived in feeling, becomes the basis of an idea of it, and we give it a name signifying the substance of the thing. In doing so, we mean that the substance of the thing is that entity which we have perceived in the feeling.‡

But, if there are two or more modes of feeling a thing, and we direct our attention to them, we immediately discover that the thing appears different according to the different modes of feeling. Thus, an object is coloured, if we perceive it with our eyes, savoury, if we perceive it with the palate, and odorous, if we perceive it with the olfactory organ, &c., and the difference is much vaster if we consider

* *Sum. Theol.*, Pt. I, quæst. lxxvi, art. iij.

† *Ibid*, ad 3.

‡ Here we must bear in mind what was said in regard to the knowledge of essences in the *New Essay*, vol. iii, nos. 1209-1212, and in regard to what is relative and subjective in the perception of bodies, *ibid*, nos. 1203-1206 and 878-905, and *Restoration*, &c., Bk. III, chap. xlvij, and in many other passages, in which we have shown that what is furnished by the feeling of things different from us always retains something subjective and relative, and that the intellect alone gives absolute cognition.

our own bodies, first, as perceived by the external organs as something extra-subjective, and, then, as perceived by the internal feeling, as the term of the fundamental feeling. Of this we have spoken at length in the *Anthropology*.

258. In the same way, the terms of our sensitive perception appear as different things when we consider them, first, in relation to us who perceive them, and, then, in relation to each other, as, for example, when we consider an external body in relation to another external body. Between one external body and another we find, on comparison, relations of extension, of size, &c.; whereas, if we compare the same external body with our sensitive principle, we find no longer these relations, but a relation altogether different, which we have called a relation of *sensility*.* The term of perception, therefore, changes according to the nature of the perceiving subject and the mode in which it perceives, so that the character of the felt, as felt, is determined by the nature of the term-entity, of the sentient principle, and of the mode of feeling. These things have all been explained by us fully elsewhere.†

259. Hence, what an entity is with respect to one feeling is not the same entity, but something else, with respect to another. This is the same thing as saying that the same entity manifests its activity in different modes according to the feelings whose term it is. Sensitive perception, therefore, takes the things perceived according to their diverse activities, as related to feeling itself; whence it follows that what a thing imparts of itself to feeling, contains a large amount that is relative.

260. The understanding, on the other hand, perceives not in a relative mode, but in an absolute mode, everything that it does perceive. To perceive in an absolute mode is to perceive immediately the entity of things itself, not their *sensility*, *extension* or other relative activities. Now we must observe that *sensility*, *extension*, and the

* *Anthropology*, Bk. II, sec. i, chap. ix, art. i; nos. 230-233.

† *Restoration*, &c., Bk. III, chap. xxiv.

other activities related to the different feelings are all comprehended in *entity*, because even the relative activities issue from entity. And, indeed, extension is an entity of its own kind; so are sensility and the rest. The understanding, therefore, perceives such activities in so far as they reduce themselves to entity; it perceives them, not precisely as such, indeed, but as participating in being. This is what we mean when we say "to perceive in an absolute mode," because, whether it be true or not that the thing is extended, coloured, &c., it is always true that it is an entity, and that even extension and the sensible qualities are entities. Hence it is that the peculiar object of the understanding is always true; because the understanding does not stop short with the relative, but considers the relative itself in relation to its own [the understanding's] absolute object. If, therefore, bodies have, with respect to each other, relations of extension, size, &c., and, with respect to the sensitive principle, a relation of *sensility*, they have, with respect to the understanding, a relation of *entity*, and this relation is absolute and necessary, whereas the others are partial and variable.

261. But, though the understanding perceives all that is given it to perceive in respect to absolute entity, still it cannot perceive more than feeling presents to it. And, indeed, what is not felt in any way cannot be perceived by the understanding. Hence, on the one hand, the understanding, as far as itself is concerned, perceives things without altering them, curtailing them, or modifying them; but, on the other hand, the things given it to perceive are already modified, or rather put together, by the limited feeling which presents them to it, and it is for this reason that the knowledge of things is limited, and not because the understanding fashions them, puts them together, or limits them.

262. From this it seems manifest that, if there were a feeling which apprehended the real entity of things in its entirety, and not merely a part, or a special activity of them, then the things would be presented to the under-

standing to perceive, without any limitation or fashioning, and the resulting knowledge would be completely absolute; and this, indeed, is the case with regard to the substantial feeling which a being has of itself. It must, likewise, be the case when Essential Being communicates itself to man in its real form; because this, being simple and immutable, cannot communicate itself otherwise than as being, and hence the sensitive principle which perceives it must be one that can perceive being itself. Such being is the object of the intellect. It follows that this principle must be an intellective sense. The intellect, then, in the case in point, as an intellective sense, feels entity as real; as intellect, it feels the same entity as ideal. It is one real-ideal entity, one potentiality uniting in itself two operations, otherwise divided, that of sense and that of intellect. In this way God is perceived.

263. The understanding, therefore, always perceives *absolutely*, that is, has *absolute knowledge* of all the things which it perceives, and a complete perception of itself; but it is only when it perceives God that it really perceives the *absolute* and so has *absolute knowledge*.* We have merely to add that there may even be *absolute knowledge of contingent things*, that is, when they are perceived as they are in God in the creative act, and there may also be a *knowledge, likewise absolute, but negative*, of things, when, by a higher reflection, we remove from relative knowledge whatever is relative in i

ARTICLE III

It follows that the Rational Principle is united to the Body by an immanent Perception of the Animal Feeling.

264. From all these considerations we may infer:

1.° That the rational principle does not communicate directly with things, in so far as they are supposed to subsist outside of the sense, but communicates with the *things felt* as they are given to it to perceive in feelings;

* *Principles of Moral Science*, chap. iii, art. vij.

2.° That it communicates with the things felt, not because these have a *relation of sensility* to it, but because they have a *relation of entity;*

3.° That the *relation of entity*, being absolute, embraces all other, relative relations, and hence, also that of *sensility;*

4.° That, for this reason, the rational soul is united to the body, inasmuch as it is united to the animal feeling, and this is so because the felt, besides having the relation of *sensility*, has also the higher and absolute relation of *entity*, which includes that of sensility, as the greater includes the less. The reason of this is, that every felt is a determinate entity; but this relation of entity manifests itself only to the understanding, which extends to all entity, because it has, for its object, entity itself, essential entity or being;

5.° That the unity of the soul and the unity of man lie in this rational principle, to whose *perception* is presented that felt term, corporeal or other, which is given to man;

6.° That, finally, the unity of man consists in a single feeling, peculiar to the rational principle, in which single feeling there is included not only the animal feeling, but also the rational feeling, in such a way that the latter contains the former, as the greater does the less. It follows that, in his first condition, man has not a plurality of feelings, the animal feeling and the rational feeling, but merely a single, simple feeling, with a principle and a term. It has a principle, and this is the rational principle itself, and it has a term, which is the idea of being, in which idea it sees the animal feeling experienced by it. For in perception, indeed, as we said before, the subsistent felt and the ideal being form a single being, the object of the rational principle. This *primitive and fundamental perception* of all the felt (principle and term) is the *thalamos*, so to speak, in which the *real* (animal-spiritual feeling) and the *essence* intuited in the idea form one thing; and this one thing is man.

ARTICLE IV.

Distinction between the Single Fundamental Feeling, which constitutes Man, and the Primitive Perception of the Animal Feeling forming the Nexus between Soul and Body.

265. But we must observe that feeling embraces the whole man and constitutes his unity; whereas the *rational* perception extends only to the animal feeling. The truth is, the percipient principle cannot perceive itself till later, by means of reflections, when, on occasion of external sensations, it experiences the need of distinguishing itself from the other contents of its feeling. Hence, there are in man, as he naturally is in the first moment of his life, (1) a single, constant, fundamental animal and spiritual feeling, and, (2) a rational, immanent perception of the animal feeling.

266. In order, therefore, to explain the union of the soul with the body, we must admit that the rational soul has a primitive, natural and continuous *perception of the fundamental feeling*, since, being rational, it can unite itself to this feeling only by a rational act; and the first of all rational acts, that which immediately communicates with the reality of being, is perception.

CHAPTER III.

NATURE OF THAT FIRST PERCEPTION, BY WHICH THE RATIONAL PRINCIPLE CONSTANTLY PERCEIVES ITS OWN FUNDAMENTAL ANIMAL FEELING, AND SO UNITES ITSELF TO THE BODY.

267. But we must not deceive ourselves respecting the nature of the constant perception of the fundamental animal feeling. Let us sum up its characteristics!

1.° The soul, by means of it, does not perceive the extra-subjective and anatomical body; but it perceives all the fundamental animal feeling as it is, indivisible, continuous, harmonious, &c.

2.° Hence it does not perceive merely the principle of feeling without its term. Indeed, the principle without its term does not exist.

3.° In the same way, it does not perceive the subjective body, which is the term of feeling, apart from its principle, because the mental separation of the term of animal feeling from its principle does not take place till later, by means of reflection analysing the feeling. In itself there does not exist a felt body distinct from the sentient principle. Hence, that primitive natural perception is not sufficient by itself to impart to us the pure notion of the subjective body, because in this perception the body is not isolated from its principle.

4.° Still less does it perceive the parts of the body separate from the whole. It only perceives the whole in its perfect simplicity and harmonious unity.

5.° It does not perceive anything extra-subjective, such as forms, sizes, extra-subjective limits, &c.

6.° Of this perception, as it is originally, we have no consciousness, because consciousness arises from reflection

on what takes place within us, and the perception in question is prior to all reflection.

268. It remains to inquire whether, in the *fundamental perception*, the soul pronounces an express affirmation.

It might be supposed to be our opinion that it did, when it is remembered that we have always united to the concept of perception that of affirmation. But this was because we were always speaking of particular and transient perceptions, to which there is always, or nearly always, joined an express assent of the spirit.

Now, however, that we are about to consider perception more generally, we say that perception has three grades: (1) apprehension, which is an implicit and habitual affirmation; (2) affirmation, expressed or actual; (3) persuasion.

269. *Persuasion* also may be implicit and habitual or express and actual, according as it springs from apprehension or from express affirmation. These two steps, affirmation and persuasion, follow each other rapidly, and the one cannot take place without the other.

270. But could the first step, that is, *apprehension* or habitual affirmation, remain without *actual affirmation?* This is precisely what happens in that first perception whereby the rational principle has a continual union with the animal feeling. This feeling, being unique and, therefore, distinct from others (there are not any others not having distinguishable limits, because the distinct limits of our body belong to extra-subjective experience), being uniform and natural, being the only thing perceived, because man has not yet perceived even himself rationally (no. 257), neither can it attract the attention, nor does the soul need to say anything to itself, or know anything to say. This, however, does not prevent us from admitting, in apprehension itself, a kind of implicit or habitual assent to what is apprehended—an affirmation not yet distinctly uttered.

271. If any one should think that the term perception does not properly belong to the simple apprehension described by us, and should prefer to call it merely *rational apprehension*, we shall not quarrel about words.

CHAPTER IV.

HOW PHILOSOPHICAL MEDITATION, ANALYSING THE ANIMAL FEELING PERCEIVED BY THE SOUL, DISTINGUISHES IN IT ITS OWN SUBJECTIVE BODY, AND RECOGNISES IT AS OF THE SAME NATURE WITH EXTRA-SUBJECTIVE BODIES.

272. But if, in the primitive perception of the fundamental feeling, the body which is the term of this feeling, is not disunited, how does man disunite and distinguish it?

This is a complicated operation of the mind, and cannot be performed without a reflection of a high order. These are the steps by which it reaches this reflection.

273. *First Step.* Man, by means of his sensions, perceives, first, exterior and extra-subjective bodies, which naturally present themselves as disunited from the sentient principle, since he observes that he is passive with respect to them, and, therefore, perceives them as a foreign force, not dependent upon the activity of his own sentient and subjective principle. This means that he perceives them as extra-subjective or independent of the subject.*

Second Step. Then, by means of meditation, he finds that in every sension produced in him by an extended, extra-subjective force, there is, besides the foreign force, something subjective.

Third Step. Meditating on the nature of this subjective element, he finds it to be a modification of his own feeling, a feeling of his own in a new and unusual mode.

Fourth Step. From the concept of modification, he infers

* As the subject does not yet fall within perception, being in the condition of mere feeling, the mind does not require to deny it or distinguish it from bodies, in order to perceive it (here lay Fichte's error); because, as we have said, external bodies present themselves as distinct to the attention of the understanding, which fixes itself upon them alone.

that, therefore, there was in it, even before that sension, an ordinary mode of feeling, which is what has been modified, and this is the fundamental feeling.

Fifth Step. But, further, he observes that the modification, or the sension which belongs to himself, expands in extension, and in an extension equal to that in which the foreign force, acting in his feeling, expands. Hence he concludes that even subjective feeling has extension as its term.

Sixth Step. Further still, he sees that every feeling presupposes an agent and a force different from the sentient principle, although indissolubly connected with it, and in many respects dependent on it. He, therefore, concludes that the term of its own fundamental animal feeling is a body, because it has the two elements that constitute body, extension, and force.

Seventh Step. By means of external sensions, he finds the limits of this term.

Eighth Step. Finally, he discovers that the body itself, the term of the fundamental feeling, falls, like every other body, within extra-subjective experience. Hence he concludes that subjective and extra-subjective bodies have an identical nature, except that the one depends upon the principle of feeling, and the other does not.

In this way he analyses the *fundamental perception* and concludes that by it a body is united to his own rational soul.

CHAPTER V.

ON THE OPINION OF AVERROÈS, THAT THE BODY IS UNITED TO THE RATIONAL SOUL BY MEANS OF THE INTELLIGIBLE SPECIES.

274. The Arabian commentator caught a glimpse of the theory set forth by us with regard to the union of the soul with the body; but the imperfection of the Aristotelian philosophy did not allow him to seize the truth, and hence he propounded a system fertile in errors.

He thought that the soul was united to the body by means of the *intelligible species* [εἶδος νοητόν].*

275. This opinion shows how Averroès observed that the rational principle could not unite itself to the body save by a rational act, because if the act of union were not itself rational, the union would not be with the rational principle, but with some other faculty.

Not knowing, however, the character and nature of the rational act through which the union of the soul with the body takes place, he declared that this act took place by means of the *intelligible species*, which, according to him, is found both in the phantasms belonging to the corporeal organ and in the possible intellect.

276. Now, it is false to say that the intelligible species is found in the phantasms. Moreover, as St. Thomas justly observed, the phantoms are the thing understood, and the intellect that which understands. Hence we cannot in this way explain how he who has the phantasms in his bodily organs is also he who understands them. He who has the phantasms would be like the wall which has colours—colours which, therefore, are not merely in the

* *De Anima*, Bk. III, texts 5 and 36.

eye which sees them. Whence he justly concluded that no system can explain the union of the soul with the body, unless it can show that the soul itself, by which man lives, feeds, feels, has phantasms, moves, and understands, is all the same soul. And this is equivalent to saying that the system required in order to explain the nexus between soul and body must be able to show that the rational soul is united to the body as closely as form is united to matter.* But the Saint, after having established this important truth that "*ipsa anima, cujus est hæc virtus (intellectiva) est corporis forma*," † stops short, without going on to propound this system. We have, therefore, tried to take this precious thread from his hands, and, as far as possible, spin it out. Let us see more distinctly the defects of the system of Averroès.

277. These defects were:

1.° That he did not attend to the nature of *perception*, which, in truth, does unite into one the perceived and the percipient. The *species*, on the contrary, defined, as the Aristotelians define it, to be a similitude of phantasms, is a thing altogether abstract and purely intellectual, whence it does not unite the phantasms to itself, and much less the bodily organs in which these are.

278. 2.° That he falsely assumed the intelligible species to have two subjects, that is, the possible intellect and the phantasms. The truth is that the intelligible species is not at all in the phantasms. On the other hand, the opposite is true of *perception;* that is, feeling, besides being in itself feeling, is also, in the idea, *essential entity*, and out of this union springs perception, as soon as man adds to it an affirmation more or less distinct; which affirmation is only a disposition and a movement of the rational principle itself.

279. 3.° That he did not observe that the phantasms are merely accidental modifications, which take place in the fundamental feeling, and that they cannot, therefore, be assumed to explain the *substantial* union of soul and body.

* *Sum. Theol.*, Pt. I, quæst. lxxv, art. 1. † *Ibid*, ad 1.

280. 4.° That he was still farther from observing the two different ways in which we perceive our own bodies, which two ways make the body appear to us as two things of different natures, though in fact it is not so. (These things we have called *subjective body* and *extra-subjective body*.) He did not observe that the union of soul and body cannot be explained in any way, so long as we set out from the concept of the extra-subjective body, which does not impart to us any knowledge of the intimate nature of the body, but merely presents to us a phenomenal body, in great measure relative to our external faculty of feeling. Hence modern philosophers of the first rank, like Malebranche and Leibniz, not having known the subjective body, declared physical influx to be impossible, and invented the hypothesis of occasional causes and pre-established harmony.

281. 5.° That he, therefore, also failed to mark that the body, as it at first adheres to the soul, is not isolated, but adheres to, it because included in the fundamental feeling whose term it is. This feeling becomes the object of that first perception, whereby the rational principle communicates with the body.

282. 6.° Finally, that the *intelligible species* is not, as he maintained, itself an act, but an object contemplated by the mind (as St. Thomas observed), and that the rational soul must unite itself to the body by its own proper act. The truth is, even if the object of its intuition were united to the body, the soul itself would not, therefore, be so, because the object intuited by it is not itself the intuiting subject.

283. From the error of Averroès, that the intelligible species is the medium of communication between the soul and the body, the strangest consequences necessarily followed.

Since the intelligible species is a pure idea, and the Arabs had made the phantasms themselves the subject of it; and, since they had laid down that the soul communicates with the body by means of that species, it followed that they attributed to the intellect and the fancy, both subjects of the intelligible species, a strange power over

bodies, not only over the bodies belonging to them; but also over foreign and distant bodies, of which they possessed the phantasms, although they did not actually perceive them. In the face of such absurdity that school did not shrink; such is the force of false principles erected into idols!

284. Hence Avicenna* declared that the human soul, by means of a powerful imagination, could transmute, not only its own body, but also a foreign body, make it sick or well, produce hail, snow, wind, draw unwonted virtues from the stars, ride to death a distant horse and lodge him in a ditch, make plants spring up without seed, or beget a man without the use of the generative organs. And the same monstrous ideas are attributed to the Moorish philosopher Avicembron and to Algazel.†

285. The Platonists fell into the same errors in another way, by confounding the *real* with the *ideal*, that is, by making ideas subsistent things. And other philosophers, half Platonists, half Aristotelians, did the same thing.‡ According to them, the intelligible species and the phantasms worked miracles, and thus they explained the miracles of Apollonios of Tyana and many other marvels related by historians, some of which were probably illusions of artificial somnambulism.

* *Sen.* II, Bk. I, Doct. ii, chap. xiv; *Natural.* iv, vii; *Metaph.* chap. vi, ix.

† Algaz. *Phys.*, Bk. V, chap. ix.

‡ See Marsilius Ficinus. *Theol. Platon.* Bk. III, chap. i; Andrea Cattaneo d'Imola, *Lib. de Intellectu et de Causis mirabilium Effectuum;* Pomponazzi, *Lib. de Incantat.;* Paracelsus, *Lib. de Signat. Rerum;* Agrippa, *Lib. de occ. Philos.;* Giacomo di Forli, *Techn.*, iii, q. xi; Celio Rodigino, Bk. XX, chap. xv. Anyone desiring to see a rich mass of erudition in regard to this matter, may read the Preface to the work: *Fatti relativi al Mesmerismo e Cure Mesmeriche*, by Drs. Cogevina and Orsoli, Corfu, 1842.

CHAPTER VI.

OF DESCARTES' "THOUGHT ESSENTIAL TO MAN."

286. And here we may say a word in favour of Descart When he said: "I think; therefore I am," he had a glimpse of a truth. The human soul, in fact, always thinks, for the simple reason that it has perception immanent in it. Descartes hence drew the conclusion that the mind must always think, because the concept of man consists in thinking, or, more correctly, contains thinking. Descartes, therefore, ought to have spoken of an immanent thinking, and not of transient acts of thought, which would only prove the existence of a subject transient like themselves; he ought also to have spoken of a human thinking, that is, of a thinking characteristic of man, which could not be the intuition of being, since that involves no nexus with the body: he ought to have spoken of a thinking proper to the subject man, composed of soul and body. This immanent thinking is precisely the primitive perception, in which lies the nexus between the rational soul and the body. He, therefore, had a dim glimpse of the truth; but he did not seize it or find words to express it.

287. Again, when Romagnosi and others replaced the argument of Descartes by this other: "I feel, therefore I am," they did not feel the full force which that dictum might have had. And, indeed, the argument, "I feel, therefore I am," has no validity as a proof of man's existence; the most it could prove would be the existence of a sensitive being. In order to prove the existence of man, we must have recourse to another act, peculiar to man, as composed of intelligence and animality, peculiar to the act of the rational principle. And since we cannot prove the

existence of man except by proving the essence of man to be subsistent, recourse ought to have been had to an immanent thought, because essence does not change. Descartes' *dictum*, thus explained, receives light, and his reasoning, force. It proves that the essence of man consists in an immanent act of thought, but does not tell us what thought. Certainly it cannot be any thought indifferently, but must be that which we have described and called natural and primitive perception.

CHAPTER VII.

ON THE ACTIVITY AND PASSIVITY OF THE SOUL, IN RELATION TO THE BODY TO WHICH IT IS UNITED.

ARTICLE I.

Relation between Formal Cause and Efficient Cause.

288. Having thus made evident the nature of the rational soul, in so far as it is the *formal cause* of man, we must now make clear how this same rational soul is the *efficient cause* of human acts.

The *formal cause* is that which constitutes a being, places it in being (essere) and preserves it; the *efficient cause* is that which makes it act.

The rational soul, therefore, as formal cause, places man in being and preserves him; as *efficient cause*, it makes him act.

But what is the relation between the formal cause and the efficient cause?

289. It is plain that the reason of the activity of any being must be sought in its form, because form imparts being, and everything acts according to its being, as the ancient mode of expression was.* Hence, St. Thomas proves that the soul is the form of the compound [man], because it is the proximate principle of all the acts of the compound. "Quo aliquid est actu," he says, "eo agit." "Everything acts with that element which makes it what it is. Now it is clear that that first something, whereby the human body lives, is the soul. And since life manifests

*Anima enim est forma, forma autem est principium agendi, non materia. Forma enim est actus et dat esse; *operari autem sequitur esse.* Th. Fieno, *De Viribus Imaginationis*, quæst. 1.

itself by different operations in the different grades of living beings, that something with which we first perform every one of these vital acts is the soul. For the soul is that first something whereby we are nourished, and feel, and move from place to place, as well as that whereby we understand. Wherefore, this principle, whether it be called intellect or intellective soul (*we* call it *rational* soul), is the form of the body." *

290. We must, therefore, find the origin of the operations of the soul, and the faculties to which these operations can be referred, in man.

But as to the specification of human faculties issuing from the form of man, we must speak of them in the second part of this work, which describes the development of the soul itself.

At present, we have only to complete what we had begun to say of the nexus between body and soul, and, in order to do so (having already explained how the soul is united to the body as its form, bringing into being the compound man), we must explain the *communion between body and soul*, that is, we must explain how the soul can produce movements in the body, and, further, how it is the only cause of all the movements that man produces in his own body.

ARTICLE II.

How, from the Nexus uniting Soul and Body through the Primitive Perception, we may Explain the Activity and Passivity of the Rational Soul with respect to the Body which it informs.

291. To recapitulate what has been said: The soul is united to the body, not by phantasms, not by intelligible species, neither of which are acts of the soul, but by a fundamental, constant and entire perception of the fundamental feeling. Now, setting out from this principle, we see that it may enable us to explain the action of the

* *Sum. Theol.*, Pt. I, quæst. lxxvi, art. 1.

rational soul upon the body informed by it, and likewise its passivity toward the same body.

What is it to perceive a substantial feeling? It is to identify the real (feeling) with the essence of being (intuited by the intellect). It is an act of the rational soul, by which it apprehends reality in relation to the idea; in a word, it is perceiving being under two forms at once. Since being is identical under the ideal, and under the real, form, and only its mode is different in the two, there is needed only one principle in order to perceive it, and this is the rational principle, in which the unity of man consists. The rational principle, therefore, receives being under the two forms, because it is the *faculty of being*, and, hence, of being under all the forms in which it communicates itself. The rational principle cannot apprehend feeling alone, because feeling by itself does not manifest *being*, which is the proper object of reason. But feeling united to being (intuited by the mind) acquires the nature of being and is manifested as such. Hence it becomes the object of the reason.* *Feeling*, therefore, must be considered in two ways, *i.e.*, either by itself, and then it is outside of the rational order, and hence must be attributed to another faculty, to another principle, that is, to the sentient, irrational principle; or else as united to the essence of being through a rational perception, and, thus united to being, it has already become a being to us—has entered into the rational order: it belongs to reason.†

* The fundamental animal feeling and its modifications never become the object of the rational principle through a *similitude* as the Schoolmen said, that is, through the *intelligible species;* but the rational principle itself perceives real feeling united to ideal being.

† Aristotle saw this union clearly; but he did not see that it was effected only in *perception;* hence he opened the way to the errors of the Arabs. In fact, Aristotle wrote that τρόπον γάρ τινα τὸ εἶδος τὸ νοούμενον τὸ τοῦ θερμοῦ ἢ ψυχροῦ ἢ ὑδέος ἢ φοβεροῦ τοιοῦτον τυγχάνει ὂν οἷόν περ καὶ τῶν πραγμάτων ἕκαστον. *De Motu Animal.* But he did not observe that the thing is not so save during perception. He wrote also that τὸ δ' αὐτό ἐστιν ἡ κατ' ἐνέργειαν ἐπιστήμη τῷ πράγματι. *De Anim.* III, 5, 2; 430 a 19 sq.), and elsewhere he says that the intellect in understanding becomes the intelligible (δυνάμει πώς ἐστι τὰ νοητὰ ὁ νοῦς· ἀλλ' ἐνεργείᾳ οὐδέν, πρὶν ἂν νοῇ. *De Anima*, III, 4, 11; 429 b 30 sq). And although he declares that this takes place through similitude, yet he does not hesitate to add that ἐν τοῖς ἔχουσιν ὕλην δυνάμει ἕκαστόν ἐστι τῶν νοητῶν. *De Animâ*, III, 4, 12; 430 a 6 sq., always confounding the *species* with the *actual perception*. The error of the Arabs, therefore, has its root in Aristotle, and this error is a truth half-seen.

Hence, even in the rational order there is feeling, but only on the express condition that it shall have become a being; in other words, that it shall have identified itself with the essence of being seen in the idea.

292. Having found the manner in which, and the condition on which, the fundamental feeling enters into the rational principle as into its subject, we no longer find it difficult to explain how this rational principle is able to act upon the body and also to be affected by the body.

And, indeed, the rational principle is unquestionably endowed with activity. This we must suppose, or rather believe, on the testimony of certain experience. The difficulty did not lie there; it lay in explaining how there could be given to the rational principle an object on which to exercise its peculiar activity. The rational principle can act only on an object which is its own. Having, therefore, found how the animal feeling can be received into the rational principle, we have overcome the greatest difficulty. But it could not have been so received except in the *perception* of this substantial feeling, because any other nexus would either not be a true physical nexus, or would not be a *rational* nexus, and so would not explain the real connection of the body with a rational principle. We must consider perception to be a real physical union of the percipient with the perceived, a union which justifies the saying of the Schoolmen that "*ex intellectu et intelligibili fit unum*,"—a saying which, when reduced to precise terms, must be thus translated: "*Ex percipiente et percepto fit unum.*"

293. This contact of the two substances, although different in nature from the contact of bodies, this contact which St. Thomas calls *contactus virtutis*, brings about a kind of continuity between the two substances, causes the one to be in the other, and hence, also, places the one in the other's sphere of action. Thus, if, with my hand, I lift a body from the ground and transport it from one place to another, I am able to do so only because the body which adheres to my hand has become, as it were, a continuation

of my hand, and thus made it possible for the motion of my hand to communicate itself to the body in question. Something similar happens in the first and fundamental perception, in its relation to the substantial feeling.

294. Let us, therefore, consider how this fundamental perception can explain to us the action which the rational soul exercises on the body, as well as that which the body exercises on the rational soul.

The object of the perception in question is the fundamental animal feeling. Now this feeling has a *principle* and a *term*, which are the sentient and the felt.

The term, that is, the felt, is the subjective body. The sentient, on the other hand, is that principle upon whose activity, when it is placed in being, the felt depends. The sentient is the active, and the felt is the passive. In fact, in the lower animals, the principle which produces the spontaneous modifications and changes of these bodies is the sentient, which in them receives the name of sensitive soul.

If, then, the rational soul of man is really united, by means of said perception, to the whole animal feeling, it follows that it is united both to the sentient and the felt, the two elements from which feeling results.

295. But the sentient is active in its nature; hence, since the rational soul can exercise its activity on the sentient without being able to change its nature, it may become active on the felt, merely because it can act on the sentient.

296. The felt, on the other hand, is in its nature, passive toward the sentient, which is what makes it an actual felt. The soul, therefore, not being able to perceive the felt, except as the passive term of the sentient, must receive it as it is. For this reason, it cannot modify it, except by moving the sentient.

297. Hence it is that the rational soul, not being able to modify the felt immediately, cannot help apprehending it. This explains how, in receiving feelings and sensions in general, it shows itself passive: not that it is truly

passive, but because such sensions are passive to the sentient principle, and their nature consists in this passivity. Hence they cannot be modified immediately by the rational principle, but only apprehended by it.

298. Thus, by *means of the perception of the fundamental feeling*, we explain both the activity of the soul upon its own body and that species of passivity which it evidently has toward it. Hence we derive this very plain and simple formula: The rational soul is as active on its own body, in so far as it is active on the sensitive principle, and no farther.

ARTICLE III.

How the Rational Soul is Active on the Extra-subjective Body.

299. Having shown how the rational soul, united to a subjective body, can be active on it, we may easily pass on and see how it can be active likewise on the extra-subjective body, and how it can produce those movements which are perceived extra-subjectively.

For this purpose, we must remember what was said in the *Anthropology* on the relation of the two bodies and the two sets of phenomena which they present.

These two bodies are but one, perceived in different ways. Their identity we have amply proved.*

300. If, however, in the *Anthropology*, we declared that we did not consider the extra-subjective phenomena as effects of the subjective, but merely as a parallel and harmonious series, it was sufficient for the purpose we then had in view to consider them so, without going into further researches. And it remains true that the subjective phenomena are not the cause of the extra-subjective; but the two series have a proximate cause in the sentient principle, and a remote one in the activity of the soul. Besides this, the extra-subjective phenomena in part result from the relations of the body to the five special organs of the external sensitivity.†

* *New Essay*, vol. ii, no. 842. *Anthropology*, Bk. II, sec. i, chap. viii, art. i; nos. 197-204.

† *Anthropology*, Bk. II, sec. i, chap. viii, art. vi; nos. 227, 228.

ARTICLE IV.

If the Rational Soul can be the Cause of Animal Movements hurtful to the Animal.

301. To the natural and radical activity of a being the ancients gave the name of *Nature*. Hence they said that the nature of a being always tends to preserve and perfect it, never to degrade or destroy it.

302. Thomas Fieno, a worthy philosopher of Antwerp, starting from this principle, proves that the soul cannot directly move of itself to produce in its own body movements hurtful thereto. "The soul," he says, "is a nature. Now this nature is a certain principle of motion in natural things—not, however, a principle of all motion, but only of that which belongs to natural things. Hence it is not an active principle of degradation." * Therefore the soul cannot degrade its own body.

On this principle Hippokratês based his theory of medicine, that is, on the force of nature, which always tends to improve and never to degrade, Νούσων φύσιες ἰητροί.

303. This doctrine seems in part contrary to what we said in the *Anthropology*,† where we distinguished in man the *medicative forces* from the *perturbing forces*.

But we must observe that the *perturbing forces* do not belong to the pure animal nature, but to other causes, which act in it and perturb it, as we shall show more at length directly.

304. Man is not only an animal. He has intelligence as well, and this, aspiring to goods far beyond the sphere of animality, can by itself alone cause degradations in the disordered animality.

305. Besides this, man, being free, has the power to pervert himself, and thus to injure, or even destroy, his own animality. The truth is, the free nature is not subject to the law which ordains that nature is the principle only of conservative and useful movements. This law is valid only for natures that act according to necessity, not for those that act freely.

* *De Viribus Imaginationis*, quæst. vi. † Bk. II, sec. ii, chap. x; nos. 401-415.

CHAPTER VIII.

IF THE INTELLECT HAS AN EFFECT ON THE BODY.

306. We have thus found the root or general spring of all the various effects which the acts of the rational soul produce upon the body: we have found it in the immanent perception of the entire fundamental feeling which man has by nature—in that perception which firmly binds the rational soul to the body and makes of the two a single subject.

And this is likewise the key to that mysterious effect which the second, partial, and transient acts of the soul exert upon the body. It will not be amiss to speak of them, collecting the facts furnished to us by experience.

307. Let us begin by touching upon the question, whether the pure intellect can at all affect the body.

The pure intellect differs from the rational principle merely in this, that the same principle, in so far as it *intuites* the ideal being, which goes beyond all finite realities, is called *intellect*, and, in so far as it perceives any reality and consequently reasons, is called *rational principle* or *reason*.

The question, therefore, reduces itself to this: Has the intellective principle, even apart from the acts of perception and reason, any effect upon the body?

308. And it is easy to see that directly it cannot exercise any action upon the body, because the concept of it excludes all communication with the body. Indeed, it is called intellect just because its object exceeds all finite realities that can be given it to perceive.

309. Still, if we consider that the intuition of being is what informs that soul, which is also rational, and which

communicates with the body, it is fair to suppose that this intuition contributes to render the soul, which is united to the body, otherwise disposed than it would be without such intuition.

And since, as we shall see, the soul presides over the organization itself, it seems certain that an intellective soul organizes the body otherwise than it would be organized by a merely sensitive soul, and makes it suitable for itself, always acting as the form of the rational principle. Thus the intellective principle, having a perfect unity with the rational, must be able to produce unity and harmony likewise in the object of its perception and in the body comprehended in this object.

310. Moreover, we must say that the intellect contributes to all those modifications of the rational principle, and, consequently, of the body, which take place through cognitions and affections having for their objects things beyond the sensible and animal sphere.* These cognitions and affections are most potent both for good and for evil to the body, so much so that we must attribute to this power going beyond animality even suicide, which does not occur in the lower animals, but only in man. But since the proximate cause of all these effects is, in the last analysis, the rational principle, let us first speak of that.

* St. Augustine writes: "*Arbitror enim omnem motum animi aliquid facere in corpore.*" Epist. ix.

CHAPTER IX.

ON THE EFFECT OF THE ACTS OF THE RATIONAL PRINCIPLE ON THE BODY.

ARTICLE I.

General Extent of this Effect.

311. The first question is: What is the power of the rational principle over the body?

312. We reply that the rational principle, considered in itself, can, by its absolute power, produce in the body informed by it all those movements capable of being produced in it by the sentient principle, with which it immediately communicates.

And I say "*absolute power*," because it is one thing for it to be able to produce those movements, when its nature and connection with the sentient principle are taken into consideration, and another for it to produce them always, without distinction of circumstances.

313. It is certain that the power, possessed by the rational principle, of moving the different parts of the body could not pass into act, unless certain conditions, of which we shall hereafter speak, were realized. If they are wanting, it seems that the rational soul is powerless to cause those movements, or causes them only with a certain amount of difficulty.

ARTICLE II.

Effect of the Special Acts of the Rational Principle.

314. Coming, therefore, to examine the effect which the rational principle can exert upon the body by its special acts, we shall say that it changes the body by two modes

of activity; that is, acting as *intelligence*, and acting as *will*.

SECTION I.

How the Body is changed by the Rational Principle through Acts of Intelligence.

A.

Perceptions. Explanations of the Spontaneity of Perceptions.

315. The first act of the rational principle is special perception.

And here at once we find ourselves face to face with a singular fact. As soon as our senses are struck by any corporeal stimulus, the rational soul moves to perform the act of perception. Whence such readiness? Whence this spontaneity of movement?

316. If the impression affected only the sense, the rational principle would not yet know that it had a sensation or a body to perceive, and, hence, it could not move to perceive it.

But this fact becomes perfectly clear, when we recur to the fundamental perception. If it is true that the rational soul perceives continually the whole animal feeling as understood, and this by a law of its nature, it is evident that it must perceive also the changes which take place violently in that feeling; and the force which produces them, that is, the stimulating body.

317. Then we are faced by the other question: Does the soul in perception exert any activity on the body?

Let us consider, first, sensitive perception, as we find it in the lower animals, and then rational perception.

Sensitive perception takes place naturally and spontaneously, as we have elsewhere explained, because the fundamental feeling necessarily feels its own modifications.*

At first, when the animal is as yet altogether undeveloped, this operation takes place simply according to

* *New Essay*, vol. ii, nos. 667-686.

that law of spontaneity whereby the sensitive principle invades the felt.*

Afterwards, the sensitive principle acquires a habit which increases its activity, and this too in virtue of the same law of spontaneity. Through this new activity the sensitive principle immerges itself, so to speak, more and more in what is pleasant to it, and shrinks from co-operating with what is painful.

Hence, we have seen that in sensitive perception there may be more or less intensity, more or less activity, on the part of the sentient principle.† Still, this greater intensity of certain feelings produced by the activity of the sentient and instinctive principle,‡ does not appear to be the immediate effect of that principle, but rather an effect due to the intimate movements produced by it in the organ of sense, and, therefore, by means of an action on the body.

318. Coming now to the rational principle, and assuming that it can perform upon the body all that the sentient and instinctive principle, perceived and dominated by it, can (no. 311), we shall have to say that the rational principle in perception can modify the organ of sense, by moving the sensitive principle to lend itself to a more intense perception.

319. It is, moreover, true that the rational principle perceives more intensely and distinctly through increase of *rational attention*. This mode of action, if it does not render the perception, as sensitive, more intense, increases it as rational. Still, it is not improbable, for the reason above stated (no. 309), that even the greater or less attention of the intelligent spirit produces certain very minute movements in the body.

* *Anthropology*, Ek. II, sec. ii, chap. iv-vi; nos. 375-384.

† *Ibid*, chap. xi, art. iii and iv; nos. 426-494.

‡ That instinct is only the activity of the sentient principle, has been shown by us in the *Anthropology*.

B.

Imagination.

320. Images are internal sensions, reproductions of external ones.

Generally speaking, they receive from the memory, or power retentive of sensations previously felt, the property of being able to act as signs of external bodies, of which we seem to see in them, as it were, the sensible image.

Now, why is it reserved almost entirely for sensations to have the power of calling forth our perception of external bodies, and why do not phantasms have it, unless they are aided by the memory of sensations?

321. The power which sensions have, and phantasms have not, of making us perceive external bodies is due to two properties:

1.° In sensions we perceive the foreign body stimulating and violently changing our organ of sense from without; but this does not take place in the case of phantasms, which are not excited by any body foreign to our own, but by stimuli and movements within our own bodies. Hence, these stimuli and movements are either felt subjectively or else are not felt with the same constancy as external stimuli.

2.° By reason of the multiplicity of the various organs, sensations, in all their multitude and diversity, may be repeated, and hence the same foreign body may be felt with various organs, as often as we choose. For this reason, we recognize in it a constant power to produce sensations, and it is this constant power that gives the concept of a permanent corporeal substance. In the case of phantasms, we have no such experiences.*

322. Notwithstanding this, once we have acquired the concepts of bodies by means of external sensions, even the phantasms, as being the sensions themselves, internally resuscitated, readily represent them to us; and we readily

* *New Essay*, vol. ii, nos. 876, 877.

unite to them the concept of the body previously formed for us by external experience.

323. Having premised this, we have now only to explain the origin of this inclination to unite the idea to the phantasm. We add to the phantasm of a stone the idea of a stone, knowing all the time that the stone, of which we have the phantasm, is neither present nor perceptible. Why this spontaneous and natural association between the phantasms and the corresponding ideas?*

324, The reason is at bottom the same as that whereby we have explained the spontaneity of the perceptions of external bodies (no. 309). The rational principle, being united to our own fundamental animal feeling by a natural and continual perception, is always in act, ready to perceive intellectively every change of that feeling.

Still, the perception of the change which takes place in the fundamental feeling does not suffice to explain how the idea of an external body adds itself to this change. This takes place, however, through the association of the phantasms with the external sensions corresponding to them and with the idea of body which we have formed by means of them. This association becomes habitual and, therefore, ready to act. Now children, when they are very young, and when they have not yet formed ideas of external bodies, or associated the ideas of these bodies with phantasms, most probably do not think a body in connection with every phantom that is aroused in them.

C.

Reminiscence.

325. The rational principle becomes more manifestly *active* upon the body in that function by which it calls into act and puts together *positive cognitions*, which are preserved as habits [ἕξεις] in it. *Positive cognitions* are those which result from two elements, the *idea*, and *feeling* or its traces. Now the rational soul, in order to recall these

* *New Essay*, vol. ii, nos. 519, 520.

cognitions to the act of its attention, must perform an action upon the *corporeal feeling*. Let us suppose that this feeling belongs to phantasms; the mind then displays the power of resuscitating phantasms, and this cannot be done without renewing the movement of the cerebral organ.*

326. Certain physiologists, ill-acquainted with Psychology, have not hesitated to call the brain the organ of thought. The truth is that pure thought has no organ, and that the brain is merely the organ of *corporeal imagination*. What causes the error into which such physiologists fall, is the readiness with which the soul associates the idea with the image.

327. The remembrance, therefore, of positive cognitions and their recomposition take place through a partial re-excitement of the images, to which re-excitement there then correspond, in the extra-subjective order, the movements in the fibres of the brain.

Now, how the rational principle is able to arouse and put together images in various groups, and to add to their vividness (this depends upon the strength of the intellective concept and upon feelings and passions which move the understanding) is a thing well known, and one that has been frequently treated of. The thought of that which is conceived as a good, stirs up glad and pleasant images, and the thought of what is conceived as an evil rouses sad and terrible ones; and these are capable of producing extreme gladness or extreme sadness.

328. The reason why man clothes ideas with their analogous images is the same that makes images call forth the thoughts of the intelligence. It lies in the association pointed out as existing between images and sensations, and between sensations and ideas. The image is taken in place of the sensation, and to this is naturally joined the intellective perception of the external body, in which again is included the positive idea. Man, therefore, as an intellective-sensitive being, requires a thought made up of *intuition* and *sension*. And his thought is not complete

* *Anthropology*, Bk. II, sec. i, chap. xiv; nos. 283-322.

unless it results from these two elements. Now, this function whereby the concept calls up the image, and the image the concept, is called by us the *human synthetic force.*

All these facts are explained with the utmost ease by means of the fundamental perception.

D.

Rational Feelings.

329. From objects perceived there arise in man feelings, glad or sad, according as the objects are perceived to be good or evil. These feelings we call *rational feelings* (or *intellectual*, if they spring from the intuition of pure concepts), in order to distinguish them from *animal* feelings, which require no use of reason, but merely sense and instinct.

Let us, still guided by internal observation, consider what is the activity of these rational feelings in changing the subjective body, and, consequently, producing extra-subjective movements.

In the first place, the object of knowledge which moves the feeling, may be different from the subject, or may even be the subject itself, contemplated as an object.

These two classes of rational feelings may be called *objective* and *subjective-objective* respectively.

330. The simple objective feeling arises in the rational subject every time it apprehends any entity, because at every entity apprehended it naturally rejoices. It is for this reason that being and good are convertible terms, according to the scholastic phraseology.* Hence, this feeling naturally becomes greater in proportion to entity, which, when greatest, produces in the mind the greatest delight.

331. The subjective-objective feeling arises when the subject perceives a good or an evil in itself. We must

* *Philosophy of Right*, Moral System, secs. i, iii.

make clear what is the good and evil of a subject, and especially, of the subject man. In general, the good of the subject man is a pleasant state or act, the evil, a painful state or act. Pleasure and pain (we use the words in their widest acceptation) belong to feeling. The good and evil of the subject, therefore, are pleasant and painful feelings. Now, among the pleasant and painful feelings of a rational subject, some are intellective, as that which we have spoken of as springing from every object of the mind; others are animal, and others still are partly the one and partly the other. When, therefore, the rational principle perceives a good of its own, there immediately springs up the feeling of rational joy; when it perceives an evil of its own, there immediately springs up the feeling of sadness, which is likewise rational. Moreover, the subjective-objective feelings of joy and sadness spring up in man, not only when he intellectively perceives his own good or his own evil, but also when he sees anything having the power to produce this good or evil, to increase or diminish it. Wherefore, the subjective-objective feeling is that which arises in man in consequence of the knowledge of his own good and evil and their causes.

332. In this way, it becomes plain that the subjective-objective feelings follow the *order of reflection*, so that we may distinguish as many orders of subjective-objective feelings (pleasant or painful) as there are possible orders of reflection, and the number of these is indefinite. Thus, after I have taken pleasure in the contemplation of an idea, reflecting on myself, I may take pleasure in my own pleasure, and this enjoyment may again be to me the cause of new delight and pleasure, if I again reflect upon it, and the same may be said of this pleasure and so on for ever.

333. Now we may consider all these rational feelings, whether objective or subjective-objective, in two modes: (1) looking altogether away from the influence which the will may exercise upon them, or (2) looking at them as modified by the action of the will.

334. If we consider them in themselves, without any regard to the influence of the will, they follow certain necessary laws, which are due to the nature of the object and the subject, and may be reduced to the following:

The *merely objective feelings* follow this law, that they are greater in proportion as the contemplated being which produces them is larger. They constitute the universal faculty which man possesses of *loving objectively*. Man, by nature, loves every being; the greater, more; the less, less.

335. The laws which preside over the *subjective-objective* feelings are more complicated. Such feelings, being due to the good or evil which man rationally perceives in himself, or to their causes, this good or evil in the subject man results from a variety of elements, (1) from animal good and evil (animal feelings); (2) from intellectual good or evil (objective and subjective-objective feelings); (3) from moral good and evil.

The rational principle perceives all those goods and evils, whose fusion produces that complex good and evil over which man rejoices or grieves.

Now, the perception of this complex good or of this complex evil, which I should likewise call a fusion of several feelings, takes place in man more or less perfectly, according as his nature is more or less perfect or perfected. It would be tedious to describe how the perception of these three species of subjective goods and evils is the more perfect in proportion as human nature is more perfect in itself, or is rendered more perfect through its physical, intellectual, and moral development. Setting aside this investigation, which would carry us too far, we may reduce to one general formula the laws which preside over the natural formation of *subjective-objective* feelings. And this formula is: Man receives pleasant or painful feelings in proportion to his natural perception of his own goods and his own evils, a perception which may be more or less true, as well as more or less vivid and powerful, according as the intellectual light and the moral feeling prevail over the animal feeling, or *vice versâ*.

336. Having premised these things, we see how the *rational principle*, with its *various special feelings*, influences the *animal feeling*, and, through this feeling, produces certain *movements* in the body.

The rational feelings always proceed from an intellection. Now the intellections of the human soul may be, in the first place, so abstracted from space and time as to be altogether without corporeal images, and, therefore, such as to require no bodily organ for their formation. Such, at least, is the idea of universal being. Now, can a thought so pure and immaterial cause any feeling?

337. Let us distinguish the various accidents of such a thought.

The first accident is, that, although the object of a thought may be in itself free from all corporeal imagination, still man, naturally inclined and accustomed to represent everything to himself by means of images, very readily associates with the act of this thought that other act whereby he arouses in himself the images, more or less delicate and subtle, which clothe the object, and make it appear, as he thinks, more luminous, while, in truth, they counterfeit it. Now, we must banish this play of the imagination, because our question relates to the pure idea.

338. The second accident is, that man, being a manifold subject, that is, a principle of many faculties, either never, or only with the greatest difficulty, moves a single faculty. Now, if we are dealing, not with simple intuition, but with reflective thinking on the object of intuition, it is impossible to start this reflection without bringing other faculties into play. Hence, I do not doubt that the very effort to contemplate the pure idea, and, still more, the effort to curb every other faculty in us, is itself a putting in motion of those very powers which we wish to keep at rest. Hence man will never be able to think the pure idea, without some action of the fibres of the brain, some tension in this organ, whose modifications follow those of the mind, as an unwilled appendage to its action. Even the actions of other faculties which accidentally accompany

the pure act of the mind must be excluded from our reckoning, because our question touches only the effect of the pure idea upon feeling.

339. Leaving out of view, therefore, all accompanying images, and all motion that follows it without belonging to it, I say that the pure idea causes a *merely objective*, intellectual feeling of pleasure, which is greater in degree, in proportion as the intuition is more perfect and more vivid.

Now, does this feeling, which is altogether alien to the corporeal order of things, influence the animal feeling, and, by means of it, cause movements in the body?

It is certain that this feeling belongs to a nature of things altogether immaterial. But we must reflect on the *identity* of the subject man, which is the principle at once of spiritual and of corporeal feelings. Now the spiritual affections of this subject, modifying its state, and rendering it more perfect or imperfect, more or less happy, necessarily produce effects and modifications, though they may be indiscernible ones, in the animal life, whose principle it is. And, indeed, experience shows that the human soul, when affected to any extent by a spiritual joy, becomes more active, and accelerates the movement of the blood, whereas sadness produces the opposite effects.

340. If we consider the subjective effect, the well or ill-being of the soul, from whatever cause it may proceed, it is, in the last analysis, a simple thing, differing in degree, but not in kind, although the causes which produce those glad or sad states may differ from each other specifically, generically, or even categorically. As the soul is simple, so likewise its mode of being, its state, is simple. It has but a single natural perfection, which, however, admits of indefinite degrees. Its perfection is its happiness. Now the more perfect and happy it is, the stronger it is; in its capacity of vital principle, therefore, it exercises upon the body an energy proportionate to its perfection. The more perfect its objective feelings are, the more full of joy they are to it, and the more happy and active they render it.

341. It seems, indeed, that actual joy, increased beyond a certain limit, produces in the body feelings too impetuous and sudden, so that they disorder it and cause death; but this phenomenon of the sensual instinct does not properly belong to human nature, being rather due to a decay in which weakened reason can no longer govern the affections. All such affections, therefore, are superinduced and unnatural.

342. What we have said of the merely objective feelings may be applied likewise to the subjective-objective feelings. These modify the animal feeling in a more direct way than the merely objective feelings, which cannot modify the animal feelings without subjectifying themselves. Indeed the objective feeling moves the body by communicating its action to it, by means of three links, so to speak, or three sets of causes and effects. Thus we have (1) objective feelings, (2) subjective feelings, (3) animal feelings, and (4) extra-subjective movements.

SECTION II.

How the Body is changed by the Rational Principle through Voluntary Acts.

343. Are then the rational feelings in question voluntary?

Some are involuntary, others voluntary.

The involuntary feelings of the rational subject are those which arise in it without the command of the will; the voluntary are those which arise in it through the action of the will, exciting them by a direct or indirect command.

344. Another question is: Can the will modify those feelings which in their nature are involuntary?

Some it can, others it cannot. Moreover, when the will modifies natural, involuntary feelings, it can do so only by a limited action, as we have explained in the *Anthropology*.

345. The universal feeling by which man tends to the good, cannot be altered by the action of the human will.

It is natural, involuntary and superior to the will which originates in it.

346. From this universal feeling, whereby man tends to the good—to all good—there naturally arise all the objective feelings, and these are subject to this law, that they are proportioned to the greatness of the being conceived, so that the natural gradation of them is the natural gradation of beings. If these feelings are considered as so ordered and graded, they are natural and involuntary, that is, they spring up in man naturally, without the act of the will, or rather, if the expression be preferred, they themselves start spontaneous acts of consentient wills. But the will may influence them, alter their order, enhance the value of some, depreciate that of others, in opposition to nature and truth. It may do this with acts which leave traces and dispositions in the soul, especially if they are repeated. These acts generate arbitrary opinions, habits of prejudice, habitual, immoral judgments and affections.

The will may also, by its own energy, by its free feelings, preserve the order of the feelings in question, and increase their vividness, by taking pleasure in them.

347. In so far, therefore, as the natural feelings of intelligent human nature* may be diminished and increased by the will, in so far they become *voluntary*, instead of involuntary.

348. But the will acts upon the body in another mode still. It acts with so swift a power that we feel as if there were no feeling intervening between its command and the bodily movement. For example, if I wish to move an arm, I move it by the mere act of my will, without observing that I have experienced any feeling of joy or pain, any feeling, pleasant or unpleasant.

349. Any one, however, who reflects more attentively, sees that the empire of the will, which moves a limb of the body, does not communicate the movement, without the

* The rational feelings may have for their matter animal feelings and goods. These become exciters of intellectual feelings, when the understanding perceives them and *judges* them goods.

intervention of some feeling, but that it does so with a feeling different from that of the affections and passions. I have distinguished the animal feelings into figurate and non-figurate,* and these latter, into external sensions (sensations) and internal sensions (images). Now the will, which commands a movement, executes this movement, for the most part, by means of images. In other words, the image of the movement which it desires to produce, or of that last attitude which the animal desires to assume, becomes the direct principle of said movement.†

350. I say "for the most part," meaning to speak of man in his developed state, in which he acts freely and commands movements through the images of their extra-subjective forms. But, in the undeveloped man, the will can produce movements through the internal feeling of its own activity alone, and even movements felt beforehand subjectively, if the feeling of such movements is agreeable or answers needs. In this case, although the man moves his limbs by an act of his will, he is still not aware of the movement which he produces in his extra-subjective form; he has not present to him the extra-subjective effect of his internal act, and, therefore, *does not will it;* but the act of his will terminates immediately in subjective and internal space. The extra-subjective movement is not selected by him from among many, nor even where it is commanded, does it proceed, as a consequence, from the relation to the internal activity, which was directed toward improving the state of feeling.

* *Anthropology*, Bk. II, sec. i, chap. vii; nos. 135-229.

† The animal movement, which starts small from the place of the image and communicates itself to the limbs, is not distinctly felt. Only the great movement, as it is produced, is felt, because in the process of production, it causes displacements of parts, as extra-subjective bodies do. The internal and subjective movements are often indistinct, for reasons which we assigned elsewhere. However, it cannot be denied that fatigue and effort are felt, when they rise to any considerable amount.

CHAPTER X.

ON WHAT CONDITIONS THE RATIONAL PRINCIPLE CAN CAUSE IN ITS OWN BODY THE MOVEMENTS WHICH IT WISHES TO PRODUCE.

351. The rational principle, therefore, changes its own body and causes movements in it, (1) by operating as *intelligence*, (2) by operating as *will*.

But it has *dominion* over its own body only by means of an action which it performs *voluntarily*.

352. Now the action of the will, and hence the exercise of dominion over the body, are dependent upon certain conditions, which we must now consider.

We said that the movements of the body may be produced by the will in two ways, either with knowledge of the effect of what it decrees, or without such knowledge (nos. 343-347), that is, without knowledge of the effect of the extra-subjective movement, as it appears to the external senses, with its relations to the other parts of the body.

When, for example, the child wishes to move its hands, it moves them either by instinct or by a decree of the will. But its will, which decrees this movement, does not know that the same movement hurts it, when it thrusts its fingers in its eyes, and, therefore, does not know the relative extra-subjective position of the hands and eyes. It is ignorant of the external effect of its internal act, wherewith it puts forth that movement.

Let us suppose, therefore, that a man has never seen himself, or ever made any movement. He determines, with his will, to move some part of his body for the first time. This part he knows only internally, subjectively: the choice of the movement is all internal: he does not

choose among external movements for the simple reason that he does not yet know them. Still, his internal choice is succeeded by the effect of an external movement, which is a new and marvellous thing to himself. It is to him the revelation of a mystery.

353. The reason why, when he performs the internal act which causes the motion, he does not foresee the external effect, or know the relation of the part that is going to move to the other parts of the body, lies in the fact that the subjective and extra-subjective phenomena are so dissimilar to each other that, prior to experience, there is no arguing from the one set to the other. The extra-subjective phenomena of motion are not, therefore, known to man *a priori*, but only by means of the experience of the external senses, to which such phenomena belong. They can neither be deduced from the fundamental feeling, nor from the internal and merely subjective modifications of this feeling.

So long, therefore, as the extra-subjective phenomena of the movements of his own body are not experienced by man, so long they remain unknown to him, and he can neither choose one in preference to another, nor at all will any of them.

354. The first condition, therefore, of the will's being able to exercise its locomotive power, by decreeing extra-subjective movements, is that the possessor of the will shall have taken cognizance of them, by having actually experienced them.

355. And even this condition is not sufficient. It is further necessary that he have learnt to recognize the nexus between the external movements of his own body (that is the movements as perceived by the external senses) and the internal decreed acts which produce them. He must have learnt that to this particular internal act there corresponds that particular external movement; he must have come to know, for example, to what internal act this particular movement of the arm or of the leg corresponds. These internal acts, decreeing external and

extra-subjective movements, are *active feelings*. He must, therefore, in his practical cognition, unite these *active feelings* with the *external movements* which follow them. These his internal movements, which are as various as the external movements which follow them, must become, not indeed the object of a speculative cognition, but the object of a *perception*. The *practical* cognition, therefore, of which we speak, is the association of the perceptions which man forms of his own active feelings, with the extra-subjective movements which follow these feelings.

356. Now, the *practical cognition* of a certain system of actions, when it is rendered habitual, is an art [τέχνη].

In order, therefore, that a man may be able to reduce to act the faculty which he has of producing in his own body the extra-subjective movements which he desires, he must learn the *art* of them; and so long as he has not learnt this, he may, indeed, have the faculty, but he cannot exercise it.

Thus it is that man has to learn how to stand erect and properly balanced on his feet, to walk, and, in a word, to perform all his external movements.

357. All men do not know to an equal degree the art of producing the movements of their own bodies. The dancer and the acrobat, the pianist, the fencer, and so many other professors of gymnastic and mechanic arts differ from other men, who are unskilled in these arts, only in having learnt the habit of making a certain series of movements of their own bodies with precision and agility. Their wills, the first cause in them of these movements, does not now choose among single movements, but among different groups of possible movements, because it already practically knows these groups, and the connection which they have with the internal and subjective acts which produce them. When one of these internal acts suffices to produce an entire group or order of movements, then this group assumes the name of *habit* or art.

358. Nevertheless, all men learn to perform certain movements of their own bodies which are necessary to

their life, and which are suggested to them by the different circumstances in which they find themselves.

Few men, on the contrary, give themselves much trouble in order to acquire the art of producing at will certain movements which are not necessary to their existence and well-being, or, rather, which are prejudicial to their well-being. In this case, the will, not being interested, leaves the vital and sensual instincts to act in their own way. This, however, does not prove that the man lacks the faculty of producing these movements with his will; but only that he does not reduce the faculty to act and habit. This is so true that, being free, he sometimes resists his spontaneous *will* with his *liberty*, even from pure caprice, and takes pleasure in displaying his power, by arresting or modifying his instinctive and spontaneous movements. For example, winking is certainly instinctive and serves to protect the eyes from fine dust and other heterogeneous corpuscles which float through the air, as well as to give rest to the sense. The will, therefore, here leaves the instinct free. Yet some individuals, who, by the strength of their wills, have resolved to do the contrary, have succeeded in keeping from winking as long as they chose. In like manner, the shutting of the eyes when an object approaches them, the contracting of the pupils under a very strong light, and the dilating of them in darkness, are instinctive movements, and yet there have been found persons who have freely trained themselves to do the contrary, as George Porterfield and Felix Fontana.

359. Although some modern physiologists attribute the contraction of the pupil under a strong light to the afflux of the blood, yet it is impossible to explain this same afflux through the mere mechanical irritation produced by the light, without having recourse to the vital and sensitive principle. The reason of the contraction in question is plainly the disagreeable sensation arising from excess of light, and sensation is a subjective phenomenon, belonging to the sentient principle, which is determined by the discomfort it feels to promote those movements of the iris

that go to contract the opening of the pupil through which the light enters, and so to diminish the sensation. But, if said sensitive principle obtains this effect by promoting the afflux of the blood, we may here observe the influence which it has on the circulation in the very small vessels. And since free-will can do the contrary, that is, prevent the contraction and dilatation of the pupil, it must have an effect on the circulation by means of the influence which it exerts on the sensitive principle.*

360. The famous example of Townshend confirms the existence of this power of the will over the circulation. It is known that this Englishman, for some time before his death, could, when lying on his back, stop at will the beating of his heart and of his pulse.† I suspect that, if his body had been dissected, it would have been found that there was some peculiarity of structure where the cerebral nervous system communicates with the ganglionic nervous system. But, as the two nervous systems always communicate with each other, it seems as if the influence of the will upon the circulation could never be altogether lacking, although it may be more or less aided in some men by a special organism.

361. Sleep also is an animal phenomenon, which must unquestionably be attributed to the sensitive principle; nevertheless, it is certain that the will can exert an influence on it through the power which it has over the sensitive principle itself. That the *intellectual feeling* can influence

* Porterfield numbers among those who were well aware that animal phenomena must be attributed to the soul. His observations on the internal movements of the eye are printed in *Edinburgh Medical Experiments and Observations*, vol. iv. But even this author, like other animists, confounds the intellective and volitional principle with the sensitive and instinctive one. In fact, in order to prove that the animal movements are produced by the will, he brings forward the observation of Lister, who maintains that the beating of the snail's heart is *voluntary* (*De Cochleis et Limacibus*, London, 1694, p. 38). The snail certainly has no will; but Lister's observation is important, and does prove that the beating of the heart depends upon the *sensitive* and animal principle. Now, it is only in man that this principle has above it the will, which, with greater or less power, guides and modifies it. However, we shall make use of Lister's observation afterwards.

† See George Cheyne, *The English Malady* (London, 1733), p. 90. This physician relates the fact, and he is also one of those who maintain that all animal phenomena must be referred to the soul, as their cause.

it, is clear from the simple consideration of how far mental exertion, and especially a fixed and passionate thought, helps to ward off sleep, and how far, on the contrary, inactivity of mind encourages it, as we see in children and thoughtless, idle people.

362. But that the intellective principle operates on sleep likewise through the more or less vigorous decree of the will, will not be denied by those who have observed nature. Not only can the will, by its energy, up to a certain point, suspend the action and the effect of the sensitive principle, when disposed to produce sleep; but it can also rouse this sensitive principle to produce this effect, especially in persons of great nervous mobility.

It is true that, when a man wishes to sleep, he places his body in an easy posture, and acts with his will more negatively than otherwise, by abstaining from acting on the understanding and from aiding and directing its action; for what most prevents sleep is the action of the mind provoked and directed by the will, and especially by the free will.

But, in proof of the fact that the will can operate even positively in the production of sleep, I do not hesitate to bring forward the phenomena of artificial somnambulism, which some persons call by a name which is, at least, rash, "animal magnetism."* Somnambulism is a particular condition of sleep. I myself once knew a certain Ricamboni who could sleep at will, and, if called during his sleep, at once somnambulized. The experiments which I made on him appeared so strange at first, that I could not rid my mind of the suspicion that there was some deception in the case; but, after comparing the fact with others, and considering all the circumstances, I laid aside all doubt as to its veracity. Moreover, having been present at certain experiments made upon a girl who had the faculty of artificial somnambulism, and having observed that the person who performed the experiments could put her to sleep, not

* See *Letter on Artificial Somnambulism* in the last vol. of my works entitled *Apologetica*.

only by manipulations improperly called magnetic, but by any other arbitrary sign or act, I asked her if she could go to sleep by her own will, without requiring any of the passes which the doctor made before her eyes. With all the ingenuousness in the world, she replied that she could, and assured me that she could go to sleep at will.

363. The will likewise exercises its power on the organs of secretion; it influences the peristaltic motion of the intestines; and who does not know that persons of great nervous mobility, like women, open and close the fountains of tears at will?

364. In one word, the intellective principle, to which the will belongs, has naturally dominion over the sensitive principle, provided (1) that it know by experience extra-subjective movements, if these are to be the objects of its volitions; (2) that it have learnt to know practically the nexus between these extra-subjective movements and the acts (active feelings) whereby it must produce them, and have acquired the habit of them.

CHAPTER XI.

OF THE PROPAGATION OF THE MOTION EXCITED IN THE BODY BY THE RATIONAL PRINCIPLE, WHERE IT BEGINS, AND TO WHAT PARTS IT EXTENDS.

ARTICLE I.

Résumé. Voluntary Nerves and Muscles. Involuntary Nerves and Muscles.

365. From what has been said, we gather,

1.° That the *rational principle* acts on the *sensitive corporeal* principle;

2.° That it performs this action on the sensitive corporeal principle in two ways, through understanding or intellective sense, and through a decree of the will;

3.° That the understanding, being a passive and necessary power, and the will being an active power, the intellective soul influences the bodily life in two ways, the one *necessary*, the other *voluntary*.

366. 4.° That, for this reason, it is no wonder if physiologists distinguish two orders of nerves and muscles, one voluntary, the other involuntary; nor is it any wonder if the same nerves are capable of being moved in two ways, the one voluntary, the other involuntary. I should not even say it is altogether improbable that all the nerves are subject to the power of the will,* although it learns to use some more easily than others, according as it is more or less necessary for man that he should have the control of them, and according as they are more or less distant from

* Willis' accessory nerve, for example, not only produces instinctive movements, but, being the instrument which gives the movements necessary for the production of the voice, it is plainly subject also to the power of the will.

the spot where the will acts directly by means of images, that is, from the brain, as we shall show.*

ARTICLE II.

In what Parts of the Body the Movements excited by the Rational Principle begin.

367. But it remains to be seen where the rational activity directly produces the movements of the body, whether it be only in the nervous system or also elsewhere, and whether the nervous system be that which, having received the motion, communicates it to the other parts.

368. In this last case, the other parts of the body would not be connected with the soul, but would merely receive an influence from the soul through the nerves, which alone would be properly animate, alone the true seat of the soul; or, at least, the sensitive principle would not be in these parts, or would not be connected with the rational soul.

369. In order to answer this question, we must first distinguish between the action of the soul on the body and the manifestation of this action through movements falling under the external senses, and hence manifesting it distinctly.

In regard to this I have not always held the same opinion. At present it seems to me probable that the

* I hold that mere psychological observation can afford us means of knowing the internal construction of our bodies. I will give an example of this, by applying observation to the two classes of nerves, the voluntary and the involuntary. Let us observe attentively what happens in the phenomenon of convulsions. There is no doubt that convulsive movements presuppose a stimulus irritating the nerves. But this stimulus is not in the smallest degree felt by the person who is seized with convulsive movements. These movements spring up in him unawares, without the action of his will, and without his feeling their first origin. We must, therefore, say (1) that certain nerves may be moved involuntarily; (2) that these produce no sensation of the foreign cause or stimulus which moves them. This fact alone proves either that there are involuntary nerves, or else that there are nerves capable of being moved by a cause foreign to the will. The latter conclusion appears to be the true one, because convulsive movements are such that, when taken singly, they may be performed by an act of the will. That such nerves should not feel the stimulus, only agrees with what happens in voluntary movements, of which we have spoken in nos. 346-348.

rational soul acts more or less on all parts of the living body, that in all the parts there is the *fundamental feeling of continuity* and with it the *sentient principle*, but that this feeling is not capable in every part of being excited immediately by the soul, for want of suitable organism, or on account of the opposition of other forces, so that the *feeling of excitation* is either wanting altogether or is exceedingly slight and limited.

370. By *feeling of excitation* I mean that organic movement capable of producing a sension.

371. In the *fundamental feeling* itself, we must admit a *feeling of excitation*, since in the living animal there is continuous motion (physically continuous) which continually excites the same feeling.*

372. We say, therefore, that wherever the *fundamental feeling* of excitation is wanting, wherever the susceptibility of the parts to excitation, that is, to receiving those internal and immediate motions which produce sensions, is wanting, there sensitivity seems to be wanting. Such is the concept which, in my opinion, ought to be formed of the parts of the human body usually called *insensible.*

373. On this supposition, the nerves are the parts organized in such a way as to admit that extent, frequency, rapidity, and measure of instinctive motions, which generate sension. Hence, although in all the tissues of the human body there is the fundamental feeling of continuity, still some of them lack excitable sensitivity, and, therefore, receive movements from the nerves (which are acted upon by the soul with great force, that is, with the force of the great muscular movements) rather than directly from the soul. To repeat what I have said before: this difference seems to be entirely attributable to internal organization, so that, of the two parts of the body equally affected by the motive action of the intellective soul, the one moves with such incredible frequency of internal movements, as to produce feeling or sension, the other

* *Anthrop.*, Bk. II, sec. i, cap. xiv, art. vi; nos. 318-321.

does not admit those undulations, oscillations, &c., the reason being that the former is a fibre with its fluids organized for such mobility, whereas the latter, not being so suitably organized, resists the impulse and makes it ineffective, or else moves without altering the texture of the minute parts.

374. On this theory, we must say that the movements called forth by the intellectual principle and capable of being known by us, begin from the nerves and propagate themselves to other parts of the human body according to special laws.

375. But this is not enough. We must inquire in what parts of the nervous system the movements produced by the intellectual principle begin.

To this we may reply generally, that the parts where movements begin are determined by the special nature of the movements themselves which the rational principle produces. But in order to classify them generally, we shall divide them into two classes, as follows:

ARTICLE III.

Continuation. Where does the Rational Instinct excite Movements, and where does the Will? Double System of Nerves.

376. We have seen that the rational principle operates in two ways, as *instinct* and as *will*.

Now to these two modes there correspond the two systems of nerves in the human body, the *ganglionic* and the *cerebro-spinal*.

When the rational principle produces movements by *instinct*, it is the ganglionic nervous system that is immediately affected; on the contrary, when it produces movements by *will*, the action is impressed on the cerebro-spinal system. This requires some explanation.

377. The cerebro-spinal system is the instrument of those feelings which we have designated *figurate* or *superficial*, that is, of *external sensations* and *images*.

Now, feelings of this kind afford matter for the cognition of extra-subjective bodies and their accidents.

Of course, these feelings are not cognitions; they are in fact, only signs of the presence of a body—signs, however, that are not arbitrary, but contain the action of the body itself.

Now, although the feeling belongs to us, and not to the agent, still the agent, by its action, has rendered itself inexistent in our feeling, that is, existent in the same superficial space in which we feel ourselves. By reason of this identity of space between the active agent and ourselves, who are passive, we attribute to the body in question, as its immediate and almost formal cause, the modification of our feeling, and thus the agent, though different from us, appears coloured, odorous, &c. The extreme precision of limits, which distinguishes figurate feelings, and their marvellous distinctness from each other, provoke us in a strange way to take them for qualities of bodies. Thus they become *matter* for our cognitions of corporeal beings.

378. Now, *cognition* always precedes the action of the *rational principle*, because this principle acts only as *cognitive* [as knowing]. But cognition does not precede in the same way when the rational principle acts as feeling, as when it acts as will.

Let a man be suddenly informed of a great misfortune, for instance, the unexpected death of a very dear relative, it is certain that, in receiving the sensible signs of this news, he makes use of his cerebro-spinal nervous system. The sensations of hearing, if the news was communicated orally, and those of sight, if it was communicated by letter, are what revealed to his mind the fatal event. We may even suppose that the beloved lost object has crossed his mind in the form of images. Still these are not necessary in order to cause the sudden swoon which follows. The mere intellectual thought, which, in the first instant, has neither time nor will to clothe itself in images, is sufficient. And yet this thought is instantly succeeded by the withdrawal of the blood to the heart, as is shown by pallor,

diminution of the pulse, shuddering, convulsions, or even, it may be, by syncope and apoplexy. These effects were not decreed by the will. They did not come from the images having their seat in the cerebro-spinal nervous system, these having no other office than to give notice of occurrences to the understanding. From the knowledge itself possessed by the understanding there started an action, which, without first having to affect the brain, communicated itself directly to the trisplanchnic nervous system, which governs the circulation of the blood, the secretions, the passions, in a word, the non-figurate feelings.*

379. But the case is different, when we consider the movements produced by the intellective principle, no longer as instinct, but as will. When this principle operates by an act of will, whether spontaneous or deliberate, it, *first*, determinates itself to will a given movement; *second*, decrees it; *third*, produces it.

380. In order that it may frame the volition and the decree of a given movement, it must first have conceived this movement. The conceived movement to which, as its object, it directs the decree of the will, is hardly anything more than one of the extra-subjective movements, because these alone are perceived by means of figurate and distinct feelings calculated to attract the attention and fix the intellectual perception. On the other hand, it is very difficult to say that the intellect perceives movement by means of *subjective presentiment*, because this presentiment, which is only the particular energy producing it, is hardly distinct from that larger presentiment which belongs to the total energy of the soul, except in so far as the total energy, passing into act, and producing the movement itself, is distinguished by its operation and so becomes a special energy. Hence, if the will produces movements without being aware of them, we must say that it does so

* The great sympathetic nerve is certainly not the organ of the figurate feelings belonging to the brain and spinal marrow; it is the organ and seat of the diffused, non-figurate feelings.

through those kinds of volition which we have called purely affectional,* and even in this case, the co-operation of the will would unite with the instinct only when this had already initiated the movement, and thus rendered distinct the energy of the soul which produces it, by drawing it out from the total energy in which it was immersed. It is, indeed, only under this condition that such separate and limited energy is perceptible by the intellect and, therefore, fit to be an object of the will.

381. Leaving, therefore, out of view this extremely obscure mode of the will's operation, and, speaking only of those volitions which have for their objects extra-subjective movements, cognizable and distinctly perceptible by the intellect, I said that, in the case of these, the object of the will, that is, the movement which it goes on to decree, is presented to the intellect through an image, which can be formed only in the brain, that being the organ of this faculty. The will wills and decrees to execute that simple or complex movement which it has beforehand conceived with the aid of the imagination. In what way the animal forces generally combine in determining and executing this act, is a question that need not be discussed here.

382. The imagination, therefore, which belongs to the cerebral system, presents to the understanding the movement, simple or complex, on which the will deliberates. The choice which the will makes is executed by its decree, which does not belong to the phantasy, but to the intellective and purely spiritual order. It is, in fact, a practical judgment, whereby it affirms that it is good that that movement should be made. This practical judgment is the initiation of that act whereby the movement is executed.

383. Now how does this execution take place?

The movements produced by the rational principle in consequence of a decree of the will must be distinguished into two classes.

Some movements are accompanied by a sensible and

* *Anthropology*, Bk. III, sec. ii, chap. viii, art. i; nos. 612-616.

animal pleasure, or by the satisfaction of a need; others are not. The former are willed for the pleasure which follows them, or on account of the need which they satisfy; the second are not willed for themselves, but are employed as means for the attainment of some good, which is properly the object of the will. For example, man has the instinct of speech; the child repeats instinctively the sounds which it hears pronounced; the bird does the same with the song of its species, &c., &c. By the movements of the vocal organ, the animal satisfies a need, an instinct, seeks a pleasure, and escapes the discomfort which it would suffer if this instinct were repressed. On the contrary, if a man buys a book, the movements which he goes through in performing this act are not the pleasant object in which his will terminates, his object being the possession of the book and the learning which he expects to derive from it.

384. Now, the rational principle proceeds in one way, when it sets about executing movements of the former class; in another, when it sets about executing those of the latter. In the former case, the pleasant sension and the movement are so conjoined that the pleasant sension itself is that immediate energy which begins and produces the movement, and the intellective energy has merely to excite and aid the pleasant feeling which by instinct produces the motion.

On the other hand, movements unaccompanied by pleasant sension must be produced directly by the intellective energy, without the aid of sension, or even in opposition to it.

Thus I, by the energy of free will, may move an arm or a leg, although such movement may be accompanied with pain.

All this our consciousness clearly attests to us.

385. Now, no wise and intelligent man will call us unreasonable, if, from the knowledge of these facts, we try to deduce certain conjectural conclusions respecting the animal organism, conclusions which only the surgeon's

knife and physiological study can turn into demonstrated truths.

The conjectures of which we speak have regard to the celebrated question, above alluded to, respecting motor nerves and sensor nerves.

It seems that those movements which are accompanied by sensations, and provoked by sensation itself, presuppose that movement begins at the roots of the sensitive nerves, which, consequently, would have the twofold property of sense and motion.

On the other hand, that class of movements which can be produced immediately by the decree of the will, without the accompanying sensions' being recognized as their immediate exciting and producing cause, suggests the supposition that they are due to motor nerves not having the property of special sense, but merely that of motion; or, if they have the property of sense, this does not manifest itself except under conditions different from those of the first, so that the rational principle, which moves them, does not stimulate them to sense, and the motion impressed upon them is not a sensiferous motion.

386. This last hypothesis, however, seems to me very probable indeed, and altogether in agreement with the special sensibility belonging to the cerebro-spinal system. In fact, the sensibility of this system, in its normal state, manifests itself only at its two extremities, that is, at the outer extremity, by means of sensation, and at the inner extremity, by means of images. Throughout the whole length of the nervous filaments no special or distinct feeling manifests itself. If, therefore, the decreed movement, which is without sension, be supposed to begin just where those images representing movement itself to the intelligence reside, we shall at once see why the movement communicates itself from the nerves to the muscles, without other sension of any kind, I mean, without any sension that appears through itself to excite and produce the movement.

387. To this it will be objected that the lower animals,

which have no rational principle, can produce movements of the second class, and the question will be asked how they do this.

I reply, by the *unitive force*. In their imaginations, movements of the first class are associated with movements of the second class, and the sensitive principle, when excited to produce the former, produces the latter, whenever they are necessary to the first; that is, the animal cannot reach the satisfaction of sense, which it seeks in the first, except on condition of producing also the second.

388. But, if the second depend upon the cerebro-spinal system, or upon a part of it, whereas the first begin either in the ganglionic system or in other parts of the cerebro-spinal system, we may draw from this fact another most cogent demonstration of the simplicity of the sensitive soul. In this case, the sensitive soul, in order to procure the pleasures, or escape the pains, connected with the movements of certain nerves, impresses the motion upon other nerves, whose roots are different from those of the first; and this it could not do, if its activity were not simultaneously present and acting in different parts and places, which is the same thing as saying that it is free from the laws of space.

389. To conclude: the rational principle, operating as instinct, exercises an immediate action on the ganglionic nervous system; operating as will, it exercises an immediate action on the cerebro-spinal nervous system. The two systems communicate with each other, as anatomists are very well aware. The lateral ganglions of the great sympathetic nerve have many communications with the cerebral and spinal nerves, and the cerebral ganglions communicate with the pneumogastric nerve.

390. Accurate observation of the accidental differences occurring in different individuals, with respect to these nervous conjunctions, would go far to throw light upon the degree of influence which the will in different men may have on the passions and on the movements of the so-called organic life.

CHAPTER XII.

CAUSES OF THE ERRORS OF THE ANIMISTIC SCHOOL.

391. In all that we have thus far said, we have taken it for granted that in the fundamental feeling there is but one, perfectly simple, active principle, which we have called the *sentient*, or *sensitive*, *principle*.

It follows from this that all animal phenomena must be referred to this as their sole cause, and also that the rational principle cannot act on the body otherwise than through this principle of feeling.

In the *Anthropology* we have shown the existence of the sensitive principle, its simplicity, and its immense activity on the body. This activity we distinguished into two branches, one of which we termed *vital instinct*, the other, *sensual instinct*.

Nevertheless, there are inveterate prejudices standing in the way of this doctrine. In order to remove some of these prejudices, it will be necessary to stop and speak of the animistic school, which, while it came nearer the truth than other schools, fell into such excesses as to disgust the world and drive it to the opposite ones.

392. The two schools, both equally misleading, from the excesses into which they ran, are (1) the *materialist school*, which pretends to explain all the phenomena of the animal body through the laws of matter, and (2) the *animistic school*, which attributes them all to the rational soul.

The *material school*, gross as it is, and ignoble, cannot offer much serious opposition to our theory, especially as it has already in several places been combatted by us.

It remains for us to submit the animistic school to a just criticism, and to show how the truth lies half way between the excesses of the two schools.

393. What then were the errors of the animistic school?

They reduce themselves to one—a failure to see distinctly that the cause of all animal phenomena is the *sentient principle.*

394. What were the causes that prevented it from knowing the precise activity of the soul, to which the facts of animality had to be referred?

The chief among them were the following:

1.° Their failing to make the proper distinction between subjective and extra-subjective phenomena;

2.° Their failing to recognize the specific difference between feeling and understanding;

3.° Their failing to distinguish the fundamental feeling from sensions;

4.° Their failing to reflect that only the *term* of the sensitive soul is extended, and that the unextended principle, which is the soul itself, cannot be divided, but may be multiplied without prejudice to its simplicity.

Let us cast a glance at each of these four causes.

ARTICLE I.

First Cause.

395. "The unity of organic effects," says Curt Sprengel in his *History of Medicine* (Sect. xv, i, 56), "even in the vegetable kingdom seems to be the strongest objection to the psychological system, and the one which no partisan of that system has ever been able to refute."

396. He is right; but the objection loses its force against the doctrines advanced by us, because,

1.° It is sufficient to find an hypothesis free from absurdity and capable of explaining this unity, in order to invalidate any conclusion which might be drawn against the psychological explanation of animal phenomena. Now, there is nothing intrinsically absurd in admitting that feeling is indivisibly bound up with the primitive elements of matter, which, on this hypothesis, would be nothing more than the extra-subjective term of that feeling.

397. 2.° Even if we set aside this hypothesis (which is, after all, not a mere hypothesis hanging in the air, as might at first sight appear), nothing more is needed to meet this objection than the broad distinction between *subjective* and *extra-subjective* phenomena. This undeniable distinction shows us that the pretended unity of phenomena is altogether false.

The truth is, all those persons who do not attribute feeling to vegetables, to their parts, or to their elements, must maintain that in these there are indeed phenomena of an extra-subjective kind, consisting of movements similar to those which appear in animals, but that there are no subjective phenomena of any kind, since such phenomena consist in feeling. Now, the material forces are perceived as the cause of movements, and, hence, we have here analogous causes and effects: it is, therefore, difficult, not to say, impossible, to demonstrate that the balanced and organic combination of organic causes is not sufficient to explain the movements of vegetables; while, on the other hand, we find in animals alone, as something special, that class of subjective or sentimental phenomena which cannot in any way be explained through extra-subjective and motive forces.

The true reason, therefore, why it has hitherto been impossible to reply to the objection in question is, that the very important line of demarcation has not been drawn between the two classes of phenomena alluded to. But we will return again to this cause, so much does it deserve to be considered.

ARTICLE II.

Second Cause.

398. The second cause which prevented the minds of the students of nature from recognizing in the soul the principle of animal phenomena was, that the psychologists who first saw the need of recurring to the soul were not able to stop at the sensitive principle, but, going beyond

this just term, laid hold of the *rational soul.* And then excess arose from this, that they never properly understood the essential difference between feeling and knowing, between sense and idea. Sensism clung firmly to all their meditations, and is still embedded in the very fibres of those philosophies which, at the present day, boast so loudly of being spiritual or rational. It is not so easy to understand that feeling and idea, far from differing merely in degree and in accidental qualities, so that the first by some of its acts can change into the second, are diverse and opposite entities; that feeling is subjective, whereas idea is essentially object. This is true of all modern philosophers, including Cousin and his disciples, who cannot conceive a feeling without, at least, some consciousness, who confound the sensible with the intelligible element, that is, inadvertently and arbitrarily add to feeling an intellective element. After committing this first error, they have in their hands a feeling, not such as it is in nature, but such as they themselves have made it with their imaginations. Setting out with this, it is certainly not difficult for them to deduce from it all the functions of the reason. All they have to do is, to develope that intellective germ which they have put into feeling and declared to be part of it.

399. In the times of Giovanni Alfonso Borelli († 1679), of John Swammerdam († 1680), of Claudio Peraulo († 1688), and of Georg Ernst Stahl († 1734*), it was no wonder if no

* It may not be amiss here to point out the precise error of Stahl's system, since he is a man of importance, and one whose works still deserve to be carefully studied. His error does not consist in his having asserted the identity of the intellective and sensitive souls in man, which is a fact, so that no one can find fault with him for having written "*Asserimus et monemus, quod utique una eademque illa anima, quæ actum rationalem seu rationem exercet, exerceat etiam et administret tam sensum atque motum, quam ipsam vitam*" (De Febris Rationali Ratione, &c.). But he does begin to err when he fails to distinguish properly between the intellectual and the sensual orders, and maintains that, even in its sensual acts, every soul, even that of the brute, operates according to reason, and hence by force of will, "*et quidem explicite* SECUNDUM INTELLECTUM ILLUM, *quem in re præsenti, de re præsenti habet: uno etiam* SECUNDUM VOLUNTATEM, *quam in genere habet, corpus seu habitaculum suum, a corruptione et interitu conservandi atque præservandi*" (ibid.). Thus, this illustrious writer came to attribute intelligence to sense, and so confounded the two. His rationalism was a sensistic one, which could not fail to perish through the mere development of the fatal germ which it bore

clear distinction was drawn between sense and idea. The world was then only just emerging from Aristotelianism, a system which presented several faces, but which had led principally to sensism, not to speak of the materialism of Pomponazzi and others. The sect of the animists, therefore, introduced the understanding into the explanation of animal phenomena, being incapable of conceiving feeling pure and simple, that is, feeling without the addition of any cognition whatsoever.

400. We observe the confusion between the principle of feeling and the rational soul in our own Borelli, who was not only the prince of "iatro-mathematicians," but must also be placed at the head of modern animists, inasmuch as he was the first to recognize that animal phenomena must be explained by means of a principle of subjective activity.

401. In a passage of his most celebrated work, *De Motu Animalium*, he undertakes to prove that the motion of the heart may be produced "*a facultate animali* COGNOSCITIVA;" * but his arguments only prove that this motion is caused by the activity of the *sensitive principle.*

Borelli observes that, when the principle of feeling (*animæ sensitivæ facultas*) is strongly affected with joy, the circulation of the blood becomes more rapid, and when it is strongly affected with grief, the circulation becomes slower. But Borelli, instead of being content to draw this most just conclusion, confounds the activity of feeling with intellective activity, and so concludes that the cognitive soul is the principle of the movements of the heart. He considers feeling itself to be an action of the cognitive soul: "*Utraque enim,*" he says, "*pulsationis variatio fit ab apprehensione et persuasione quæ sunt* ANIMÆ COGNOSCENTIS *facultates.*" And again, confounding sensibility with the cognitive soul, he adds: "*Ergo talis motus cordis fit a*

within it. Anyone who attributes intelligence to sense does not elevate sense, but degrades reason while he appears to elevate it. No peace can be maintained in the kingdom of philosophy without drawing distinctly the line of demarcation between sense and intelligence, and keeping it inalterable. Wars are continually breaking out in it on account of unsettled frontiers.

* Pt. II, prop. lxxx.

facultate sentiente et appetente, non vero ab IGNOTA *necessitate.*"*

402. In this we may see the origin of modern sensism. The world had received an ancient inheritance, of which Scholasticism had been the last testatrix, namely the prejudice that *feeling* was a kind of *knowing*. In vain St. Thomas had somewhere said, almost *en passent*, that feeling was not a true knowing, but was merely called so by a kind of metaphor. This wise, but too brief, remark was not sufficient to correct the prevalent impropriety of speech or the erroneous opinion which it carried along with it.

At the same time, Borelli, though misled by a false inference into confusing feeling with knowing, did seize an important truth, a truth which had been overlooked by the animistic school and then rejected by the mass of scientific men, for the same reason as that for which the error had been accepted.

403. In fact, when anyone presents to the world an error embraced along with a truth, the world accepts the error, because it sees the annexed truth and attends solely to it.

Afterwards, when the error also has been admitted, this mixture of error and truth is rejected, because the truth, which is found to be incoherent with the prevailing error, is not accepted. Finally, there comes a third stage, in which that is accomplished which was not accomplished before. The old whole is broken up, and, the truth being separated from the error, the former is retained and the latter rejected. This is that sort of chemistry of opinions, which I have tried, as well as I could, to apply to the most controverted philosophical questions.

404. But what most contributed to mislead our Borelli's very acute mind was, that he considered the effect of the passions in man only, instead of considering them in animals universally. And it is true that, in man, a piece of very glad and unexpected news, filling him with sudden joy, makes his heart beat violently; a very sad piece of

* Pt. II, prop. lxxx.

news, on the other hand, depresses him and almost makes his heart cease to beat. Now, we are here dealing with pieces of knowledge, and, therefore, we are in the intellective order. But what does this prove? It merely proves that pieces of knowledge, possessed by the understanding, have the power to excite the affections of joy and sadness, not that they have the power to accelerate or retard immediately the beating of the heart. If, therefore, pieces of news influence the circulation of the blood, it is only through the medium of the affections which they first produce in the human subject. And these affections belong to the order of feeling, and occur even in the lower animals, not on account of any knowledge that they have, but in virtue of blind instincts, and through the unitive force, of which I have spoken at length in the *Anthropology*.

405. The intellective soul, therefore, communicates with the *sensitive principle*, and sets the activity of it in motion. All this happens within the subject; but, after all, it is to the activity of the sensitive principle that we must attribute the affections modifying the matter and the body which are the term of that principle.

406. A most important question, but one entirely distinct from the preceding, is this: How does the intellective principle act upon the sensitive one?

Psychology must deal with both these very distinct questions, and we have already begun to do so by distinguishing them from each other, and by pointing out why they have hitherto been confounded by the most serious inquirers. This appears to us to be the first step forward.

407. Hence, proceeding to make clear the reasons why philosophers have gone so far astray as to take intelligence (by them confounded with sense) as the sole means of explaining animal phenomena, we shall observe that they were even drawn into error by the vestiges of the highest wisdom, which are to be seen in the operations of the animal instinct. With good reason Galen showed himself transported by them. And he had likewise very good reason

to use them in combating the sect of the Epicureans, who rejected divine providence,* just as he made a very sensible observation, when he reproved those who designated the cause of generation and other animal phenomena by the word *nature*, maintaining that to invent a term is not to explain facts.† But when he saw the difficulty of explaining how the substance, of which, first, the embryo, and then the fœtus, are composed, and which performs such regular and complicated motions, could possibly be anything irrational,‡

* Admiring the very ingenious formation of the fœtus and inquiring its cause, he says: "Hence it is that when we hear Epikouros and the rest trying to make out that all things take place without providence, we do not believe them" (*De Format. Fœtuum*).

† In the work just quoted, he speaks of those who "think that they have said a great deal when they have said that the fœtus is formed by nature, and yet they have only uttered a name which is used by everybody."

‡ See the same work, *De Formatione Fœtuum*. Galen laments that philosophers have not attended to this great question, and relates that he became the disciple of several masters successively, without ever discovering what he was in search of. He adds that he, therefore, set about studying the question by himself, and arrived at these results: (1) that the formation of the animal, and the movements of the animal after it is formed, cannot be explained without the assumption of an intelligent formative principle; (2) that, nevertheless, the child moves without knowing the anatomy of its own body or the muscles which it moves, and that, therefore, it is necessary to posit another intelligent principle different from that which wills and presides over the involuntary muscles; (3) that we must, therefore, say, either that the intelligent principle which formed the animal remains in it, even after it is formed, or else the every muscle is a separate animal. Here is the passage in which he sums up his argument. "For this reason (not having found among any of the masters of his time any one to show him the formative principle of the animal), being deeply grieved, I strove myself to discover some sufficient reason to explain the formation of animals and their cunning workmanship. But, not having found any (in the material parts), I wish to record and testify to this fact in this work, and I exhort and beg all philosophers who excel in these sciences to make diligent search for it, and liberally to communicate to us what they wisely succeed in discovering. The fact is, when I see that children speak, and say all those things which we bid them say, *e.g.*, myrrh, scalpel, soap, without knowing anything about the muscles which move the tongue in such a way as to pronounce such words, or even (and this is stranger) the nerves of these muscles, I hold it to be in the highest degree credible and probable that the framer of their language, whoever he may be, either himself remains in the parts already formed, or else that these same parts have been constructed and formed by so many animals (so many souls) *knowing* the will of the principal part of our soul. But, when I see myself thereby driven to the conclusion that there must be another soul alongside the principal part of our reason, and other souls also in the several parts, or else a common soul governing everything, I go back, doubting, to my primitive ignorance. Then, when I hear some philosophers say that matter was animate from all eternity, that it looks at ideas, and, looking, embellishes itself, I go meditating anew, and thinking that there must be a soul which made us and still makes use of all our parts. But what detracts very much from the value of this opinion is, that we do not know this soul which governs us, and governs the parts that subserve its appetites and its motions." Further on, he says: "I see in the formation of the animal at once supreme wisdom and supreme

then he went astray, in not understanding that, while there must certainly be an intelligent cause, it need not, on that account, be confounded with the animal substance, in not distinguishing, in a word, the ultimate and creating cause (God) from the proximate cause (Nature), and in failing to conceive the proximate cause as lying in feeling, which, though blind, is a most fit minister to the divine intelligence, by which it was created.

408. The celebrated Stahl was led into the same error by another truth, which he saw, but which he wrongly applied. He saw that the understanding performs many of its acts without man's being conscious of them. This was a precious truth; but it did not justify the conclusion, which he arbitrarily draws from it, viz., that all animal acts belong to this class of unconscious intellective acts.*

409. In holding this doctrine, Stahl fell into two errors. *First*, he distinguished imperfectly the unconscious operations of the understanding from the conscious ones, and, *second*, he classified the acts of the animal feeling among the unconscious operations of the intellective soul.

He did, indeed, distinguish reason (λόγος) from reasoning (λογισμός), and here most correctly. To the first he attributed all unconscious acts, to the second, all conscious ones, which is entirely erroneous. A more attentive obser-

power, and I do not think that the fœtus can be formed, as Aristotle thought, by the vegetative soul implanted in the seed, nor by the sensitive soul, as Plato believed, or by what the Stoics called (not soul at all, but) *nature*." From these and other passages in the writings of the famous physician of Pergamon, we see (1) that the better minds of antiquity were aware how absurd it was to believe that animal phenomena are produced by a *brute* and material *cause*; (2) that they did not know the nature of feeling, but confounded it with intelligence, whence, in order to avoid the absurdity of the brute cause, they fell into the opposite excess of supposing a *rational cause*; (3) that they had something of an insight into the fact that matter might be united to feeling, but did not see the mode of this union, and that they fell into the erroneous doctrine of eternal matter, being unable to form the concept of creation; (4) that they likewise saw dimly that feeling might be turned to the intuition of ideas by nature, but that they knew neither the unity of ideas, nor the organization given by the Creator and necessary for the production of this intuition.

* Stahl maintains that the reason which operates without consciousness is the *Nature* of Hippokratês, which operates without reflection (οὐκ ἐκ διανοίης), and, therefore, wisely, the φύσις ἀπαίδευτος of which that father of medicine wrote "Ἡ φύσις ἐοῦσα καὶ οὐ μαθοῦσα τὰ δέοντα ποιέει" (Ἐπιδημ. vi, 5). Cf. *Propempticon Inaugurale* περὶ φύσεως ἀπαιδεύτου.

vation, directed to our internal operations and supplemented by induction, brings us to this result, that we go through processes of reasoning of which we have no consciousness, and furnishes us with this marvellous universal law: Every act of our minds is unknown to itself and requires another act (reflection) to reveal it to us.

410. As to the second error, that of classifying the operations of sense among those of unconscious reason, it is easily recognized by mere internal observation. In the first place, it is not true that all that takes place in our feeling is unconscious. On the contrary, it is true that of any feeling of our own we *may* have consciousness, and, if we could not, it would not be *our* feeling. For "our feeling" means nothing more than "the feeling of which we may acquire consciousness." But, though we may become conscious of every one of our own feelings, as a matter of fact, we are not conscious of them all.

411. Of course, feeling does not include self-consciousness. This consciousness we must form for ourselves, by internally observing that feeling which takes place in us. But we must distinguish our own feelings from those which may be in our bodies without being ours. Our own feelings are:

1.° Those of which we may become conscious, but are not, because we do not direct the attention of our thought to them.

2.° Those of which we are actually conscious.

412. Now, that there are, besides these, in our bodies, feelings which are not ours, because we cannot at all become conscious of them, we know from the fact of the existence of entozoa, and we may also conjecture that no corporeal element is without feeling. But these feelings are outside of us as individuals. Only the first two classes of feelings belong to our individuality, and are, for that reason, our own.

413. Now, fixing our thought upon the second class of feelings, those of which we have actual knowledge, we can easily discern whether or not they are of a rational nature,

simply because we know them, because we are conscious of them. Well, this consciousness tells us that those feelings lack the characteristics of cognition, because they have no *object*, but an exclusively subjective character, being simply modifications of the subject, and that the cognition and consciousness which accompany them do not belong to them. And this is precisely what essentially separates knowing from other entities. Every cognition is an act which terminates in an object, without confounding itself with that object. Altogether different is the animal feeling. It is completely of the opposite nature; that is, it is a purely subjective act, not going beyond itself to terminate in any object distinct from itself, or distinguished by itself. It is, therefore, an error to confound, as the animistic school did, the feelings with the rational acts of the soul.

ARTICLE III.

Third Cause.

414. The third cause which prevented the true principle of animal phenomena from being seized was, that the nature of the fundamental feeling was not known, and the belief was entertained that the whole of feeling could be resolved into special sensations, excited by extra-subjective stimuli.

415. Hence came that wonder which led Galen, and many others after him, to see that men and animals can move their nerves and muscles, in order to satisfy their needs, without knowing what nerves or muscles they are moving, or what is the conformation of them. These philosophers and naturalists found it impossible to believe that the human will could employ, with such consummate wisdom, parts of which it had no knowledge—knowledge such as can be acquired only by learned men through the slow study of anatomy.

416. Those who reasoned thus did not see at once that anatomical knowledge is not the only knowledge that a

man may have of the human body, or even the most trustworthy, that is, the best calculated to acquaint us with its true nature. They did not see that external experience, such as guides anatomists in dissecting and examining bodies, is conditioned by the subjective action of the external senses, sight, touch, &c., which do not present to us the nature of things, but only their phenomena, resulting from two combined causes, the nature of the organs of sense, which are the instruments of such observation, and that of the stimuli applied to them; whence it follows that what is derived from them is, so to speak, only a series of phenomena containing a good deal that is subjective, and altogether foreign to the proper and inner nature of the body observed. Not knowing the importance of this observation, these naturalists blindly trusted to extra-subjective observation, as the only sure means of knowing animal bodies.

The truth, on the contrary, is, that the body is known by two kinds of experience, the one extra-subjective, the other subjective, and that the latter is the one which indicates its true nature.

Subjective experience presupposes the fundamental feeling, whereby the sensitive principle feels all the parts of the body to which that feeling extends. It is true that this feeling does not give the external limits of these parts, their forms, &c., these being phenomena of extra-subjective experience; but the extension of the body is not less felt with the fundamental feeling, though it is felt in a different way, than with the external sensations.

417. Further, it is true that this fundamental feeling is not cognition, but only the possible material of cognition. Still, it supposes as present the activity of the sensitive soul, wherever it occurs. Hence, we need not wonder that the soul uses those parts which it feels and invests, according to the laws, and for the benefit, of its individual feeling. This, however, is constituted by a supreme intelligence in such a way as, with its acts, to attain wise ends. At the same time, these ends are ends only for

the Creator; for the feeling they are terms, conditions, attitudes, pleasant feelings, to which it continually turns by its own natural forces, through which it is.

ARTICLE IV.

Fourth Cause.

418. Finally, the fourth cause of the error into which the animists fell was, that they did not distinguish the principle of feeling from its term and, for this reason, could not form the true concept of the sensitive soul, whose essence consists in being the principle of feeling, and not its term.

The want of this most important distinction committed them to enormities, which contributed greatly to throw discredit on their system.

And, indeed, if we do not distinguish the term of feeling from its principle, which alone constitutes the soul, we fall at once into the absurdity of making the sensitive soul material, extended, mortal.

Pressed by the objections of Leibniz, Stahl was obliged to admit the necessity of this conclusion.* But, if it is correct, either man will have two souls, or else the self-identical soul will partake of materiality, extension, mortality! The only reply that the religious Stahl could give was, that he looked for the immortality of the human soul not from its nature, but from grace.†

419. Moreover, if we do not distinguish the unextended principle of feeling from its extended term, we cannot in any way understand the theory of the individuation of sensitive souls, or the power which they have of multiplying, without dividing, themselves. Now, suppose this theory were not yet discovered, and that, nevertheless, we wished to explain all animal phenomena by referring them to the soul, what are we to say of certain phenomena, which are admitted even by our opponents, as being

* *Leibnitii Opera*, vol. i, p. 156. † *Negotium Otiosum*, pp. 102, 103.

animal, and which, nevertheless, take place in the body even some time after the death of the animal, *i.e.*, the irritability and contra-distention of the muscles? Robert Whytt, who in Scotland rehabilitated the system of the animists, did not hesitate to affirm that the activity of the soul remains present in those muscles and is increased by stimuli.*

* *Sämmtliche zur practischen Arzneykunst gehörige Schriften*, Berlin, 1790, p. 252.

CHAPTER XIII.

THE ACTIVITY OF THE SOUL UPON THE EXTRA-SUBJECTIVE BODY.

420. Going back now and resuming what we have said: we have seen:

1.° That the rational soul is united to the fundamental animal feeling by a natural and immanent perception.

2.° That, inasmuch as there are in the fundamental feeling two elements, the sentient and the felt, the rational soul must be united to both.

3.° That to be united to the *felt* is the same thing as to be united to a particular subjective body, a union by which it becomes passive, because that body is passive.

4.° That, from being united to the *sentient*, it becomes active, and can act upon that principle which governs the felt or the body, and, hence, can act upon the body itself.

5.° That, in the lower animals, the sentient is what constitutes the sensitive soul.

6.° That the sentient principle has that indissoluble union with the felt, which we have explained in the *Anthropology*.

421. In proving these things, we have spoken only in a passing way of the extra-subjective body.

And, indeed, when we have explained the nexus between the soul and the subjective body, we have also explained its relation to the extra-subjective body, because the two bodies are substantially one and the same, although the latter is clothed with other appearances, by reason of the different mode in which, and the different faculties by which, it is perceived by us.

Nevertheless, we would here say one thing more. Philosophers have hitherto been but little acquainted with

the subjective body; they have always conceived the corporeal substance as clothed with those phenomena which are furnished by external and extra-subjective experience; and when the question has been put to them: How does the soul act upon the body, or *vice-versa?* they have always supposed the extra-subjective body to be meant, and hence their perplexity.

In order to get rid of this perplexity, therefore, we must show the relation between these two bodies perceived by us, because when this is known, it is very easy to understand how the action of the soul upon the extra-subjective body takes place, in consequence of its action upon the subjective body.

We trust the demonstration we are about to undertake will afford us an opportunity of lifting, before the eyes of many, a corner, at least, of that almost impenetrable veil which conceals the mystery of sensation—a mystery which certainly receives no small light from the exhibition of the nexus existing between extra-subjective and subjective phenomena. This nexus we have already shown to lie in the identity of the space occupied by the subjective and extra-subjective phenomena.

422. And, indeed, if we admit that there is a fundamental feeling, diffused through all the sensitive parts of the human body, so that it occupies the same space in which the extra-subjective phenomena manifest themselves, and that the nerve, for example, which I see with my eyes and touch with my hands, is the very same that contains the subjective feeling which renders that nerve naturally felt in another, that is, an immediate, way, to the possessor of it, it follows that all the movements produced in that nerve will, on the one hand, present themselves to external observation as extra-subjective phenomena, and, on the other, will effectively modify the subjective feeling inherent in the nerve.

Be it observed, however, that, although we say that a subjective feeling diffuses itself naturally in the whole space occupied by the nerve, we do not, therefore, say that

this space is outlined and figured in the natural and fundamental subjective feeling. Nothing of the kind. Space is figured and limited only by external sensation, which gives the extra-subjective phenomena. One of these phenomena is that of *surface sensations*, which, so far as we know, have never been considered by philosophers, but which we have discussed in the *Anthropology*. Surface sensations are properly those which outline bodies for us, and give birth to their forms, their determinate sizes, and hence their proportions, and, in this way, are what furnish us with all the knowledge which we frame to ourselves from such elements. It is in this way, and in this way alone, that the external world is fashioned, so to speak, by man's external sensitivity. The inner world, on the contrary, being shut up in subjective feeling, presents none of all these apperceptions. Still, the space occupied by the fundamental feeling, although without boundaries or relations to other spaces, and, therefore, seemingly obscure, simple, and not adapted to excite the attention, is the same space (we repeat) that by the external sensations is afterwards defined, figured, and, in a certain way, illuminated and distinguished from the totality of space; and it is in this same space, moreover, that that corporeal organ, to which feeling adheres, receives movement.

423. It is true that, if we suppose this external body, this corporeal organ, to change place, without any relative motion's taking place within it among the molecules or particles which compose it, in the internal feeling inherent in the body nothing would happen from which anyone could become aware of the local change. The reason of this is, that mere change of place is not sensible except through the relative position of external bodies, which is not given by the fundamental and subjective feeling, but only by accidental sensations and extra-subjective phenomena.* But, if in the living body itself, to which the feeling adheres, internal movements are produced, as when a nerve shortens or lengthens by a certain animal elasticity

* See *New Essay*, vol. ii, nos. 806-809.

or contractility of its own, then the feeling inherent in the nerve will contract or relax itself, in order to accumulate in a smaller space, or extend in a greater. Let it be carefully observed, we do not say that the feeling inherent in this nerve presents movement to our consciousness; we repeat, the feeling does not become distinct except in virtue of extra-subjective phenomena. What we mean, therefore, is, that the sudden shortening or lengthening of the felt nerve must necessarily produce a modification in the fundamental feeling. Its activity must be aroused, since it has a stimulus forcing it to assume a different form. The feeling, therefore, which is aroused in virtue of the foreign force, when its activity is thus shaken, stimulated, densified, must produce a felt modification, since every activity of feeling is felt.

424. But what shape will this modification take? In what form will this sensitive activity, when drawn from its state of repose, display itself? This is something which it is impossible to tell beforehand. Experience alone can inform us. Now, we know from experience that these phenomena are the transient sensations, colours, sounds, odours, tastes, tactile sensations, &c. These are, therefore, *excitations of the fundamental feeling*.* It was difficult to explain how the movements of a body could produce these

* Black is usually said to be the absence of colour, and this is certainly true, since by colour we mean either the different sensations which the eye receives, when it is struck by rays of light, or the power which certain bodies have of absorbing part of the luminous rays and of reflecting another part, or else the luminous rays themselves. In none of these three significations can black be said to be a colour. But does it follow that the mere absence of luminous rays will make the word signify nothing but a mere negation? To us it does not seem so. We hold, on the contrary, that black is a feeling, and, indeed, the *fundamental feeling of the retina*, which feeling, when excited by appropriate motions, displays its activity in colours. Let the reader try to close his eyes gently in a dark place, so as to exclude all rays of light, and then let him concentrate his attention and observe whether his consciousness shows him any difference between the state of his eye thus freed from all excitement, and the state, let us say, of one of his fingers, in regard to feeling. I think he will observe that in the two parts there is a different feeling, and that he will attribute the feeling of black to his eye and not to his finger. It may be said that this fact is due to the recollection of the sensation of colours previously felt by the eye and not by the finger; but this does not seem to me to be the case. It seems to me that I perceive a true difference of feeling, apart altogether from any comparison with previous states. Besides, there is no reason why the mere absence of colours should produce the feeling of black, and not the absence of all feeling whatsoever.

excitations in a feeling which is not a body. But, when we find that there is a fundamental feeling, adhering essentially to the body, and diffusing itself in the same space as the body, that difficulty seems to vanish. At the same time, we must observe that, in order to draw from the fundamental feeling certain special sensations, it must be roused and agitated by certain stimuli, according to certain laws, with certain movements, in certain organs to which it constantly adheres.

425. I say "according to certain laws," because not all the movements of the organs excite the fundamental feeling, so as to arouse sensations. Hence, in order to produce them certain conditions are necessary, an apparatus of nerves, a particular mode of excitation, a certain rapidity of vibration. All this still remains, in great part, unknown.

426. We will add an observation respecting the undeniable fact that several organs must concur to produce a single sensation: for example, the optic nerves, the lobes of the cerebrum and the cerebellum, the optic thalami, &c., must concur in order to produce vision. The necessity for so complicated an apparatus of organs, in order to produce so simple a sensation, will cause us no surprise, when we reflect upon the following truths already set forth:

1.° That the sentient principle is one and simple;

2.° That sensation requires an activity to be excited in this sensitive principle, the true cause of sensation;

3.° That the entire fundamental feeling, in all its extent, lies in the unextended sensitive principle, not as one extended lies in another, but as a felt lies in the sentient, a mode which we have called the *relation of sensility;*

4.° That the sensitive principle is excited, shaken, actuated by internal movements produced in the organs forming parts of the felt.

5.° That these movements, though varied and belonging to various organs, all tend to one effect, namely, to excite the sensitive principle, by first contracting and condensing, and then dilating, its felt term;

6.° That, therefore, although every condensation and

dilatation of the felt must be succeeded by some modification of the feeling and of the activity of the sensitive principle, still, we need not wonder that, to enable special sensations to display themselves in it, movements of a certain multiplicity, variety, frequency, &c., are requisite.

427. By all these things much light seems to us to be thrown upon the birth of sensation.

This fact was inexplicable before the discovery of the distinction between subjective and extra-subjective phenomena, because the explanation of sensation is equivalent to the solution of the great question respecting the communication between body and soul.

As long as men's thoughts were confined within the sphere of extra-subjective experience, they laboured in vain to invent hypotheses. A real communication between the spirit and the body was never found.

Hence philosophers were divided into two classes. Some falsified the concept of spirit, rendered it extra-subjective, in one word, imagined that it was some sort of very subtle body, impalpable to the senses. In this way they rendered possible any reciprocal action between it and the grossest bodies.

Others clearly saw that this was destroying the spiritual being, that it was a materialism which might explain a mechanical relation, but not a relation of feeling, and so they either denied all physical influence between soul and body, and dreamt various hypotheses,* or else, more wisely,

* When Descartes deprived the soul of all power of acting on the body; when his disciple, Malebranche, invented the system of occasional causes, and Leibniz that of pre-established harmony, the minds of those great men had a glimpse of a noble truth, but were not able to circumscribe or formulate it. They had dimly seen that *subjective* phenomena and *extra-subjective* phenomena were specifically different. Hence they despaired of finding the nexus between them, and had recourse to hypotheses, not only gratuitous, but involving absurdity. How came they thus to go astray? Because they did not take sufficient trouble to observe nature. Internal observation, the consciousness of what passes within us, when religiously listened to, is what tells us that in animal feeling there is a simple principle with an extended term. When we have discovered this *fact*, we ought to leave off all reasoning and be content, if we mean to be true disciples of nature. Now, the *fact* thus brought to light presents to us the simple principle and the extended term as forming a single feeling, in which the communication between the soul and the body (principle and extended term) is the most intimate, and I should say, the most physical, that can be imagined.

applied the name of mystery to the whole question, thus sealing with a respectable word, not only their own mouths, but likewise the mouths of all those profane people who sought to reason further.

I believe I shall be doing something agreeable to my readers, if I say a few words about some of the strange thoughts to which the former were reduced, in order to imagine how the spirit, being a kind of very subtle gas, could be united to this crass and voluminous body of ours, by a gradation of other more subtle intermediate bodies. I will take the exposition of these systems from Fernel, to whom they seem of indubitable certainty.*

428. "First, the Academics," he says, "observing it to be impossible for two most disparate natures to form a close union with each other, without the aid of some medium, maintained that our souls, formed by the Supreme Artificer of things, before emanating and immigrating into this dense and concrete body, were clothed with a sort of simple garment, in the shape of a body, pure, ethereal, and like the stars, a body which, being by nature immortal and eternal, could no longer dissolve or separate itself from the soul, which without it could not even become a denizen of this world. Moreover, they surrounded the soul with another body, likewise thin and simple, but, nevertheless, more impure and less noble and splendid than the preceding one, not procreated by the Supreme Artificer, but concreated through the mixture of the elements, especially of the rarer ones, from which it takes the name of aërial and ethereal. Now the soul, swaddled in these two bodies, and driven, like an exile, into this third mortal or perishable body, or rather, into this dark and horrid prison, becomes a denizen of the earth, until, having burst its prison and returned to the free air and to its native country, it becomes an inhabitant and citizen of heaven." †

* *De Naturali Parte Medicinæ*, Bk. IV, chap. i, ii.

† The Indian philosophers tried to explain the communication between soul and body in the same way. They clothed the soul with a subtle form called *linga*, *linga-jarîra*. Moreover, between the *subtle form* and the crass

These aberrations of the imagination were necessary, if the communication between soul and body was to be explained without any knowledge of the subjective nature of the latter. Indeed, the only thing to be done was to attribute to the former also an extra-subjective nature, but one so thin as to escape the senses. Hence, in this matter, the whole of ancient philosophy followed the same route. Let us follow the history of opinions, still in the words of Fernel. He goes on to explain that of Alexander of Aphrodisias in these terms: *

"Alexander of Aphrodisias, in confirmation of this

body, they imagined a middle link, a thin body serving the five organs. This was the doctrine of the school of Kapila. Henry Colebrooke, in his *Essay on the Philosophy of the Hindus*, explains the doctrine of the Vedanta school in these terms:

"The soul is incased in body as in a sheath, or rather in a succession of sheaths. The first or inner case is the intellectual one (*vijnánamaya*): it is composed of the shear (*tanmátra*), or simple elements uncombined, and consists of the intellect (*buddhi*) joined with the five senses.

"The next is the mental (*manomaya*) sheath, in which mind is joined with the preceding. A third sheath or case comprises the organs of action and the vital faculties, and is termed the organic or vital case. These three sheaths (*kos'a*) constitute the subtile frame (*sákshma-s'aríra* or *lingua-s'aríra*) which attends the soul in its transmigrations. The interior rudiment confined to the inner case is the causal frame (*kárana-s'aríra*).

"The gross body (*sthúla-s'aríra*) which it animates from birth to death in any step of its transmigrations, is composed of the coarse elements, formed by combinations of the simple elements, in proportions of four-eighths of the predominant and characteristic one with an eighth of each of the other four: that is, the particles of the several elements, being divisible, are, in the first place, split into moieties; whereof one is subdivided into quarters; and the remaining moiety combines with one part (a quarter of a moiety) from each of the four others, thus constituting coarse or mixed elements. The exterior case, composed of elements so combined, is the nutrimentitious (*annamaya*) sheath; and being the scene of coarse fruition is therefore termed the gross body.

"The organic frame assimilates the combined elements received in food, and secretes the finer particles and rejects the coarsest: earth becomes flesh; water, blood; and inflammable substances (oil or grease), marrow. The coarser particles of the two first are excreted as feces and urine; those of the third are deposited in the bones. The finer particles of the one nourish the mind; of the other, supply respiration; of the third, support speech."—(H. T. Colebrooke: *Essay on the Philosophy of the Hindus.* Miscellaneous Essays, edited by his Son, London, 1873, ii, pp. 395, 396.)

This singular coincidence of the Hindu, with the Greek, hypothesis proves either that philosophy must naturally fall into this hypothesis, when it has not the true concept of subjective being, or that the Greek philosophy is derived from the Indian, perhaps through Pythagoras, who, according to Diogenes Laertios, Clemens Alexandrinos, and Ælian, travelled in India, or else that Indian philosophy is more recent than is generally believed, as is suspected by Ward, who holds that the Indian writers do not date back beyond the year B.C. 500, and that their philosophy was received from the Greeks. According to this author, Gautama was contemporary with Pythagoras.

* *In Problematibus.*

communion between body and soul, says that there exists between them a most fitting bond, in the shape of that spirit to which we have alluded, and which by its mediation conciliates and contains the two opposite natures. This spirit, being familiar and in harmony with both extremes, and not being altogether devoid of body, can insinuate itself into the crass body, and being, to a considerable extent, thin and splendid, it can connect itself with the soul. Being thus, in a certain way, a partaker in both, it mixes the incorporeal nature with the corporeal, the immortal with the mortal, the pure with the impure, the divine with the earthly. And although these things show that the communion between body and soul cannot take place except through the nexus of the intervening spirit, still it is well to extend this communion even to the other and perishable parts of the soul. That part of the soul which is generated under mortal conditions, although impure and not unadulterated like the mind, still stands too high above the condition of this earthly concrete body to be able to adhere to it without some bond."

Coming to the opinion of Aristotle,* which he tries to reconcile with the preceding, Fernel says:

"Hence, Aristotle with good reason maintained that in the seminal and frothy body is contained the *spirit*, and in the spirit the *nature*, which corresponds proportionately to the element of the stars. His meaning evidently was that this spirit is interposed between the body and that divine nature, as a kind of common bond. And not only to the mind, but also to every perishable part of the soul, he assigns a particular spirit, asserting that every faculty of the soul partakes of another body, a body more divine than those which are called elements; and, as souls differ from each other in nobility and obscurity, so also do the natures of these bodies."

Whence, gathering up the preceding opinions, Fernel concludes very gravely: "If then, with clear judgment, we will weigh the reasons of Aristotle and the rest, it will appear

* *De Animalium Generatione*, Bk. II, chap. iii.

manifest that every part of the body leans upon a certain spirit as its base, by which spirit it both resides in the body and there exercises all its functions." And by this *spirit* he means the very subtle body which is the vehicle of *innate heat*,* because innate heat cannot exist without a fluid to inhere in, to be contained by.†

Thus, being unable to conceive the subjective nature whose phenomena they saw, they struggled in vain to attribute these phenomena to the extra-subjective nature, subtilizing it so as to make it escape the external senses and withdraw itself from extra-subjective experience. They thereby showed, at least, their conviction that the phenomena of the soul must be explained by something altogether foreign to extra-subjective experience, but without knowing what there could be beyond this experience, and without understanding that the laws of the most subtle extra-subjective body, however entirely they may elude the senses, are all essentially the same, and that body does not change its nature, however big or little it may become, since bigness and littleness are accidents and nothing more.

* He then undertakes to prove that this innate heat is not the elementary heat, but a heat of a particular nature.

† This is how he tries to prove this thesis: "*Cum nequeat simplex calor in qualitatis genere constitutus sine sede et vehiculo in omne corpus permeare, huc illucque momento diffundi, qualiter tamen hunc a corde per omnes arterias partibus singulis impertiri cernimus: fuit, opinor, necessarium hunc corpore aliquo fluxo et profluente contineri. Caeterum nullus humor ad hoc aptus erat et habilis ut tanta celeritate corpus omne trajiceret: quocirca necesse fuit calori materiam substerni substantia tenuissimam, pernicitate velocem, quae simul fovendo, calori familiaris esset et amica. Atque cum ejusmodi sit aërea, aut si rectius appellare velis, ætherea, optima ratione debuit talis calori subjici, quæ semper ætheris modo incensa ardet, cuique perpetue calor insidet, ut neutrum possit ab altero dirimi.*" And he observes that Plato sometimes, and Aristotle and Hippokratês very frequently, call this *caloriferous matter* by the name of spirit. *De Naturali Parte Medicinæ*, Bk. IV, chap. ii.

BOOK IV.

ON THE SIMPLICITY OF THE HUMAN SOUL, AND QUESTIONS WHICH IT SUGGESTS.

429. If human souls were without bodies, no one would doubt their spirituality. It is their union with the body, therefore, that gives occasion to doubts respecting their simplicity and spirituality in minds that have not succeeded in attaining a clear knowledge of the nature of that union. For this reason we devoted the preceding book to the elucidation of it. Having discovered this most important truth, which has been the subject of so many disputes—disputes whose aimlessness has induced very sensible, but somewhat impatient, men hastily to conclude that it was an impenetrable mystery—we have, on the one hand, cleared away the difficulties raised by the materialists, and, on the other, we have placed ourselves in a position to maintain the soul's spirituality, without falling into errors of another kind, such as those into which the spiritualists were led when they undertook to expound their true, most noble, and consoling dogma. Indeed, pre-established harmony, occasional causes, Berkeleyan idealism, the Aristotelian act of the body [ἐντελέχεια τοῦ σώματος], subtle bodies bordering on the supposed tenuity of the spirit (to these all the chief systems which have undertaken to explain the animal phenomena which appear in matter may be reduced) are so many errors, fertile in most pernicious consequences. It will now, therefore, be of service, if, collecting the results of the doctrines set

forth in the preceding book, we proceed to deal *ex proposito* with this essential property of the soul, which has been called simplicity or spirituality. This property brings up very important questions, such as that of the origin, generation, or multiplication of the soul (call it by what name you will), which are not indeed difficult, except in so far as it is difficult to conceive the mode in which the soul, being spiritual and simple, acts upon the body and is acted on by it, and is subject to passions which appear similar (although they are only analogous and proportionate) to the passions of matter. We shall, therefore, begin by setting forth, at greater length than we did before, the direct proofs of the simplicity of the human soul.

CHAPTER I.

WHAT IS MEANT BY SIMPLICITY.

430. In the first place, we must observe that the word *simplicity* is used in various acceptations.

First, it is used to exclude *multiplicity*, in which sense it is equivalent to *singleness*.

Second, it is used to exclude extension, and then it is equivalent to *unextendedness*.

Third, it is used to exclude *materiality* (sensiferous force), and then it means *incorporeality* or *spirituality*.

Now, in all these modes the soul must be simple.

CHAPTER II.

CLASSIFICATION OF THE PROOFS OF THE SIMPLICITY OF THE SOUL.

431. The proofs of the soul's simplicity may be conveniently reduced to three classes, drawn,

I. From consciousness;

II. From the special properties of the soul furnished to us by consciousness;

III. From its operations, that is, from the necessity of supposing the soul to be simple, in order to find a sufficient reason, a proper explanation, for these operations.

CHAPTER III.

THE SIMPLICITY OF THE SOUL MAY BE INFERRED FROM THE PROPERTIES WHICH IT POSSESSES.

432. The direct proof, drawn from the inner consciousness, was given above.

From the properties of the soul we may draw the following proof of its simplicity.

We set out with the definition of the soul. The soul is the principle of feeling and understanding.

From this definition it follows directly that the soul is simple, in other words, that *multiplicity*, *continuous extension*, and *materiality* do not enter into the concept of it.

Now, every being has its own properties, and by these it is determined and distinguished from every other. The properties which specify one being cannot be communicated to another that is not of that species, because, if they could, the species of things would be confounded, and species are inconfusible. This distinction is founded in the intrinsic order of being and is immutable.* It is sufficient, therefore, to prove that the concept of the soul and the concept of multiplicity, extension, and materiality are specifically different concepts, in order to prove that they exclude each other, and, therefore, that the soul is neither multiple, extended, nor material.

433. As to *multiplicity*, it is opposed to all real substance, since there can be no real substance that is not one.

* Christian Wolf defends the thesis: The attributes of one being cannot be communicated to another. His proof is based upon *the principle of the sufficient reason* and runs thus: Suppose that to the being *A* there is communicated an attribute which it has not. This attribute has not its sufficient reason in the essential constituents of the being. Hence we are forced to admit something that has no sufficient reason. But this is absurd. Hence the attributes of one being cannot be communicated to another. *Physiologia Rationalis*, sec. 45. The demonstration is perfect.

As to *continuous extension*, we have seen that it occurs only in the felt and in the sensiferous. But the soul is the sentient principle, and the sentient is a concept specifically different from the concept of the felt or of the sensiferous. Therefore, the soul has not extension.

In the same way we may prove that it has not *materiality*, because the materiality of the body consists in that force which violently [βίᾳ or βιαίως] modifies the felt, which modification alone is known to us. Now, the force which modifies and changes the felt has a concept entirely different from that of the felt itself, and much more from that of the sentient; it is a concept of brute force opposed to feeling. The soul, therefore, which is the sentient principle, has nothing to do with materiality, and is, therefore, immaterial.

434. If we consider other properties of the soul, *e.g.*, its property of being a *principle*, we shall arrive at the same conclusion. The nature of a principle excludes multiplicity, extension, and extended matter. Setting out from the *identity* of the soul, we come to the same result (nos. 140-180), so that the proofs of the soul's simplicity are as numerous as its attributes.

CHAPTER IV.

PROOFS OF THE SOUL'S SIMPLICITY FURNISHED BY ITS OPERATIONS IN GENERAL.

435. Finally, we may prove the simplicity of the soul from the fact that it is the only ground sufficient to explain its diverse operations, and this in three ways. In other words, it may be shown that the efficient principle of these operations must necessarily be simple, (1) from the *nature of these operations*, through the manifest opposition between the extended and the principle whose term it is; (2) from their *mode*, through the opposition between the extra-subjective phenomena, which include the concept of matter, and the subjective phenomena, which belong only to the sensitive subject; (3) from their *term*, through the opposition between the multiplicity of the subjective phenomena and the singleness of their principle.

How numerous, therefore, are the proofs adducible in confirmation of the soul's simplicity!

Every operation of the soul, when carefully examined, furnishes three; since we may argue that the soul is simple, from the *nature*, the *mode*, and the *term* of that operation.

436. In truth, as soon as it is demonstrated that a given operation cannot be produced except by a simple principle, it follows that this principle cannot contain anything at variance with simplicity. If the case were otherwise, it would no longer be the principle of that operation, as we supposed it to be, since it cannot at the same time be simple and not simple. In fact, let us suppose that this principle contains something that is not simple. This non-simple element is not the principle of that operation; it is

something else. Therefore, it is not the soul. A single operation, therefore, incapable of being performed save by a simple principle is sufficient to prove that the soul is altogether simple.

437. The demonstration of the soul's simplicity drawn from the intellective operations is very intelligible to any one whose mind is not warped, because these operations are most plainly free and pure from all material concretion. Hence, even the ancient physical philosophers, who clothed the soul, so to speak, with a variety of shirts woven of the finest æther, did not hesitate to recognise the complete immateriality of the soul. For this very reason, beginning with what is most easy, we will first set forth those proofs of the soul's simplicity which are drawn from the operations of sense.* These alone would suffice to prove the immateriality of the human soul.

438. In fact, when we have proved that the operations of sense cannot in any way be explained, unless they are supposed to be effects of a simple cause, we have at the same time proved that the soul to which these operations belong is simple. For, since in man the sensitive principle is substantially identical with the first intellective principle, if the former is simple, the human soul, which is at once the first principle of feeling and knowing, must also be simple.

439. The force of this argument is felt even by Lucretius, when he tries to use it in order to prove the mortality of the intellective soul, deducing it from the mortality of the sensitive soul.

"Atque animam verbi causa cum dicere pergam
Mortalem esse docens, animum quoque dicere credas
Quatenus est unum inter se, conjunctaque res est."

To this we reply that the sensitive soul multiplies and does not die, as we shall see. Hence, neither does the intel-

* Italian philosophers, like Riccati and Garducci, have already drawn from this source various proofs of the simplicity of the soul. Garducci, in the last of his *Letters to an Italian Philosopher*, shows that the renovation of the body is a proof of the soul's spirituality.

lective soul die. And with much greater force, we argue thus: The former is simple; therefore, the latter also is simple. In other words, if the sensitive soul were extended and corporeal, we might doubt whether the intellective soul might not receive from it some extension and corporeality; but since the former is unextended and incorporeal, it may be united to the intellective soul as simple to simple, and yet their union and identification produce nothing extended or corporeal.

CHAPTER V.

PROOFS DRAWN FROM THE PASSIVE AND ACTIVE OPERATIONS OF THE ANIMAL.

440. We have already demonstrated elsewhere that sensitive operations require a simple principle, so that it would involve a contradiction to suppose them produced by a multiple or extended principle (*Anthropology*, Bk. II, sec. i, chap. vii; nos. 92-134).

But, inasmuch as these sensitive operations are of two kinds, we then confined ourselves to proving the simplicity of the sensitive soul from the passive operations of feeling. Now, similar proofs may be drawn from the active operations of instinct.

441. The proofs of the simplicity of the soul deducible from the passive, as well as those deducible from the active, operations of the animal, are distinguishable into three classes. It appears, therefore, with equal clearness that the sentient principle is simple.

1.° From considering that the sensation of the extended-continuous can in no way take place, unless there be a simple principle embracing in itself, by virtue of feeling, the whole of the continuous extension at once.

2.° From considering that the extra-subjective phenomena of the body, which always manifest themselves along with sensation, are different from, and opposed to, sensation, and that, whereas the former are manifold, the latter, which is excited along with them, is one. Hence, the actions of the extra-subjective body, such as the movements of fibres, &c., cannot be the immediate cause of the sensations, as, indeed, we saw; they can only be phenomena parallel with them, or their mediate cause.

3.° From considering that the same principle of feeling experiences a variety of sensations. Indeed, the sensation of the multiple is inexplicable, if we do not admit a simple principle, embracing at once within itself, in virtue of feeling, all those various modifications.

442. The first of these three classes of proofs distinguishes and separates the soul entirely from the subjective body and from the *extended;* the second excludes from the soul all *materiality* belonging to the extra-subjective body; the third excludes from it all *multiplicity.*

And they are all susceptible of further development.

Let us indicate only the development that might be given to the first two.

CHAPTER VI.

DEVELOPMENT WHICH THE PROOF OF THE SIMPLICITY OF THE SOUL MAY DERIVE FROM THE NATURE OF THE CONTINUOUS.

443. The first proof, derived from the nature of the continuous, was already adduced in the *Anthropology;* but it might be amply illustrated by the authority of the ancients and their speculations on the necessity of a simple principle to hold the body together and prevent it from vanishing into nothingness.

And, indeed, if it is the property of the extended body that every part assignable in it is outside of every other and independent of every other—and we never succeed in assigning in a body any part in which others and yet others cannot be assigned—it necessarily follows that, if the parts are not united and held together by a simple principle, it becomes an absurd substance, because that is absurd which cannot be thought, and in a body the first parts are not found existing in themselves, since in every part assignable, there is still a smaller part outside of all the others, and there remains no extended part that is wholly in the whole of itself. There remain, therefore, only simple points existing in themselves. But such points are not a body, nor are they parts of an extended body. Consequently they cannot form a continuous, however much they may be multiplied. Even an infinite sum of beings, each having an extension equal to zero, can give no result but an extension = 0. Hence the extended either does not exist, or, if it does, it does so only in a simple principle which holds it together.

444. This was the irrefragable argument of the Platonists of Alexandria.

It is stated by Nemesios in these terms: "In opposition to all those who maintain that the soul is a body, we need only adduce the arguments of Ammonios, the Master of Plotinos the Pythagorean." They are these: "Bodies naturally change, and are completely dissipated, being divisible *ad infinitum*. Hence if there remains in them nothing that is immutable, they at least require something to contain and connect them, and, as it were, to restrain and retain them; and this we call the *soul*. Hence, if the soul is a body of any kind, however thin, we shall still have to ask: What is it that holds it together? For we have shown that every body requires something to hold it together, and so on *ad infinitum*, till we arrive at something which is altogether without body."*

445. We must not, however, suppose that this mode of argument was original in the Alexandrine period. It is an inheritance which that school received from the earliest Italian philosophers.

When Xenophanês began to speak of *unity* as necessary to explain the nature of all things, we may be sure that he had not yet any distinct ideas. In fact, we are told by Aristotle that he did not explain whether he meant unity of matter or unity of concept.† But merely to have felt, in a general and indistinct way, the need of recurring to a *unity*, in order to give consistency to nature, was already a sort of dim insight into the fact that the body could not be without something simple to hold it together.

446. Xenophanês was succeeded in Italy by Parmenidês and Melissos. Both maintained the principle of unity; but the former, according to the conjecture of Aristotle, maintained that unity proceeded from reason, whereas the latter tried to find it in matter."‡ It seems, therefore, that both forgot *sense*, the first going beyond it to intelligence,

* *De Natura Hominis*, chap. ii.
† *Metaph.*, A, chap. v; 986 b 21 sqq.
‡ *Ibid*, 986 b 18 sq. Παρμενίδης μὲν γὰρ ἔοικε τοῦ κατὰ τὸν λόγον ἑνὸς ἅπτεσθαι, Μέλισσος δὲ τοῦ κατὰ τὴν ὕλην.

the second stopping short at *matter*. The reason of this was, that sense and intelligence were then not yet completely distinguished. So, while Parmenidês confounded sense with reason, Melissos confounded it with matter. Still, both dimly saw the need of a *simple*, in order to explain nature. Moreover, that Parmenidês included sense under reason, is plain from what follows in Aristotle, who says that "Parmenidês holds that being is, and non-being is not. But, being obliged to follow phenomena, and holding the one to be due to reason, and the many to sense, he again lays down two causes and two principles, the *hot* and the *cold*, in other words, *fire* and *earth*. Of these two, he places the one, that is, the hot, on the side of being, the other on the side of non-being." *

Now, how could he maintain fire to be a condition or property of the being which is one for reason, except by considering fire or heat as the principle of life, produced, in great measure, by the respiration of the air, which is decomposed by contact with the blood, through an operation similar to that of combustion? Here, therefore, we see plainly that in his *being*, and in his *one* according to reason, there entered animal life, or the sensitive principle, which is just what, by its simplicity and unity, makes bodies unities, in other words, makes them such and such somethings, the beings that they are, that is, extended bodies.

447. Parmenidês and Melissos were followed by another great light of the ancient school of Italy, Zênô of Elea, whose arguments against the existence of motion are, when carefully considered, all plainly due to this principle: "Being has no unity in itself." If, therefore, we have no simple principle to contain and unify body, not one of the phenomena of body is explicable. Indeed, body then becomes a congeries of contradictions and absurdities.

* *Ibid*, 986 b 31 sqq. See C. H. E. Lohse, *De Argumentis quibus Zeno Eleates nullum esse motum demonstravit et de unica horum refutandorum Ratione*, Halle, 1794, and Ch. L. Gerling, *De Zenonis Eleatici Paralogismis motum spectantibus*, Marburg, 1825.

448. Akin to this argument, drawn from the nature of the continuous, is that drawn from the existence of the whole soul in every part of the body—an argument developed by St. Augustine,* St. Thomas,† and many others. Even the moderns have denied the truth of it only because, having cast aside internal observation and the testimony of consciousness, which alone are trustworthy witnesses in questions concerning the soul, they have gone astray into the paths of abstract reasoning, imagining the mind a kind of minute corpuscle situated in some particular part of the body. The truth, on the contrary, is, that the soul, so far from being limited to dwelling in any determinate part of the body, is evidently everywhere where it feels, since its whole nature is reducible to the immanent act of feeling. To this no foreign element can be added. Hence, when we say that the whole soul is in every part of the body where it feels, we mean nothing more than that it receives and has in itself the felt, and, therefore, this argument for the simplicity of the sentient principle reduces itself to the first argument for the unity of the continuous, since the continuous is continuous only because it resides in the simple. Such was the conception of St. Thomas, who constantly affirmed, "*Magis anima* CONTINET CORPUS ET FACIT IPSUM ESSE UNUM *quam e converso.*" ‡

449. An illustrious father of the Church, also an Italian, Paulinus of Aquileia, who wrote in the eighth century, writes to the same effect. "The soul," he says, "in a wonderful manner governs the whole continuous mass of the body, which otherwise would disperse and divide, and diffusing itself through the whole, animates and vivifies it, and, like a central point, indivisibly preserves its own dignity and does not dissolve into foreign qualities. Being incorporeal, it corporeally disposes everything by means of the body, and the substance of the flesh, being corporeal,

* *De Trinitate*, vi.
† *Sum. Theol.*, Pt. I, quæst. lxxvi, art. viij.
‡ *Sum. Theol.*, Pt. I, quæst. lxxvi, art. iii.

performs corporeal actions by means of an incorporeal creature, *i.e.*, the soul."*

* *Adversus Felicem Urgelitanum.* St. Gregory Thaumatourgos in his *Disputation on the Soul*, which is still extant, lays it down as a principle that "the soul knows itself immediately from its own peculiar actions" (*eam ex propriis actionibus cognitam habemus*). The peculiar action of the soul is, that it gives life to the body. He, therefore, undertakes to examine how this takes place. He shows that, if it were united to the body as one solid adheres to another, it could not animate the whole of it, but only the points of contact; if it were mingled with the body as one fluid is with another, it would divide into parts, and would no longer be that one, identical soul which at once animates all the parts of the animal body: It follows, therefore, that it must be all in all the parts of the body, and so remaining one, give life to all. "*Nam si illi (corpori) sic adhæret ut lapis lapidi, sequitar ut corpus sit anima nec totum corpus animatum sit, cum parti cuidam adhæreat. Sive cum corpore mixta, confusaque est, e propria ratione dejecta multis partibus constabit, nec simplex erit. Atque corpus adjunctum corpori molem auget: anima vero in corpore existens, illud non tumidum sed vivum efficit. Non igitur corpus, sed expers corporis est anima.*"

CHAPTER VII.

DEVELOPMENT OF THE PROOF DERIVED FROM THE OPPOSITION BETWEEN THE EXTRA-SUBJECTIVE PHENOMENA WHICH ACCOMPANY SENSATION AND SENSATION ITSELF.

450. Now, coming to the second of the proofs alluded to, we ask: What evidence might not this proof obtain, if profiting by the labours of anatomists and physiologists, philosophers would make it their business to confront the extra-subjective phenomena (of matter) with the corresponding phenomena of feeling, and carefully mark all the oppositions between them? I will give a slight example of how this might be done.

1.[Q] The nerves, to whose movements sensation corresponds, are composed of very fine threads, called nervous fibres, communicating with each other here and there in the form of a *plexus*. It is maintained, moreover, that every nervous fibre has a fine, transparent envelope called *neurilemma*. The extra-subjective phenomenon, therefore, which precedes or accompanies sensation, is not the movement of a single fibre, but of a bundle of innumerable fibres. If, therefore, the sensation were the mechanical and material effect of the movement, the sensation ought to be, or, at least, to represent, a multitude of different movements. On the contrary, however, the sensation is one. It follows that there must be a single principle in which, and in virtue of which, it arises, since it could not arise in the many fibres vibrating simultaneously with so many distinct movements. Hence, the phrase repeated to the echo by hundreds and hundreds of writers: "The impressions of external things, received at the nervous ex-

tremities, are carried to the brain," is altogether inaccurate. What are these impressions? Are they the *idola* of Epikouros? No one now-a-days will return to such dreams. They can be nothing but movements. But movements are not *carried* to the brain. They *communicate* themselves to it, which is as much as saying that they extend along the nervous fibre as far as the brain. We must, therefore, replace the incorrect phrase by this other: All the nervous fibre, or all the nervous substance of the fibre, moves; but, if the movement is not continued to the brain, there is no sensation. Plainly, the impression itself cannot be carried, because it is not a carriable thing. It remains where it was made, at the outer extremities. It is only the beginning, the received impulse of the motion. If we admit that this exists in the extra-subjective, as parallel to sensation, still all that we have is longitudinal motion (whether this takes place by means of solid filaments or liquids, in a mechanical or dynamical way, is now entirely indifferent to us) extending to the brain. Now, sensation, which is the subjective phenomenon corresponding to it, does not present length, nor is it felt in the brain, but at the extremity to which the force was applied. The extra-subjective phenomenon, therefore, presents extension; the subjective does not. The former requires different movements in different parts, in which no subjective phenomenon whatever manifests itself. The latter, therefore, is not the former, nor is it a mere material effect of the former, because, if it were, it would retain the likeness and the nature of the former. Motion can produce only motion, unless there is a principle of altogether another nature: extension can give only extension.

451. Extra-subjective phenomena are still further complicated, in the opinion of physiologists. The sensible nerves are bound together. They have certain dependences upon each other, and, when these are removed, the phenomenon of sensation no longer manifests itself. Magendie, by repeated experiments, found that the sensitivity of the head, and, particularly, of the face and its

cavities, depends on the fifth pair of nerves, so that if this nerve is cut before it leaves the brain, the face no longer feels. Moreover, he believed he had demonstrated that the chief seat of general sensibility and of the special sensories is not in the cerebrum or in the cerebellum, and cites this experiment in proof of his view. "Remove the lobes of the cerebrum and cerebellum of a mammal, and then try to discover whether it can feel, and you will readily recognise that it shows itself sensitive to strong odours, to tastes, sounds, and savoury impressions. It is, therefore, positively certain," concludes the physiologist, "that the seat of these sensations is not in the lobes of the cerebrum or of the cerebellum."* A still more extensive and complicated mechanism manifests itself in the extra-subjective phenomena which precede or accompany the subjective phenomena of vision. "It follows," says Magendie again, "from the experiments of Roland and Flourens, that sight is destroyed by the removal of the cerebral lobes. If the right lobe is removed, the left eye no longer sees, and *vice versa*.† A wound in the optic

* *Précis Elémentaire de Physiologie. De la Sensibilité.*

† The second of the four proofs given by us in the *Anthropology* in support of the simplicity of the sentient principle, is based upon the doubleness of the organs of certain senses, the eyes, the ears, &c., to which simple sensations correspond. The force of this proof, therefore, depends upon our having shown that the sense-organs are two, and two, in consequence, the sensations which the soul receives and puts together into one, by reason of its simplicity. Now, these experiments of Roland's show that the optic nerves do not unite in the cerebrum, as some had supposed, but that they are two quite distinct organs of vision and not one; and this proof becomes all the more cogent, when we observe that the optic nerve of the right eye terminates in the left lobe of the cerebellum, and the optic nerve of the left eye in the right lobe. As to the doubleness of the sensations, it is no wonder that Dr. Gall made every effort to prove that we never see but with one eye. Of course, the fact that a man sees simultaneously with two eyes could not fail to be in the highest degree embarrassing to a system tending as strongly as his to materialism. But in defiance of all this, Magendie says: "It is proved, not only that the two eyes coöperate simultaneously in vision, but that they must both act in order to produce certain acts of the highest importance to the function of sight. Allow a ray of the sun to fall upon a plane in a dark room, and then take very thick pieces of glass, each coloured with one of the prismatic colours, and place them before your eyes. If you have good sight, and especially, if your eyes are of equal strength, the figure of the sun will appear to you whitish, whatever be the colour of the glass you have used. But, if one of your eyes is very much stronger than the other, you will see the figure of the sun of the colour of the glass which you have placed before your stronger eye. These results have been verified in the presence of Mr. Tillaye, junior, in the cabinet of physics belonging to the Medical

thalamus of mammals is likewise followed by loss of sight in the opposite eye. I have never known a wound in the anterior optic or quadrigeminal tubercle interfere with vision in mammals; but this result very clearly manifests itself in birds. Thus, the parts of the nervous system necessary for the exercise of vision are several. The exercise of this sense requires integrity of the hemispheres, of the optic thalami, perhaps of the anterior quadrigeminal tubercles, and, finally, of the fifth pair. Be it observed, moreover, that the influence of the hemispheres and of the optic thalami is crossed, whereas that of the fifth pair is direct.*

Now, if, in order to produce a single sensation like that of sight, so many different organs at once concur, it is

Faculty. A single object, therefore, really produces two impressions, and still the brain perceives only one." (*Précis Elémentaire de Physiologie. Action Simultanée des deux yeux.*) This most absurd consequence, which Magendie draws from the fact attested by him, viz., that the brain perceives only one of the two impressions, is a manifest proof of the incredible power which prejudices of education have in drawing away the most acute minds from the truth, in spite of all their good resolutions to watch over themselves, and not assert anything that is not proved. The learned physiologist recognises that each eye receives not only a distinct impression, but an impression accompanied with sensation; he knows from his own experiments that each of the optic nerves terminates in a different lobe of the brain; and yet he asserts with the utmost confidence that the brain has but one impression, because only one sensation is manifested. Any person of common sense can readily recognise that the brain can neither simplify the two distinct impulses, which it unquestionably receives, nor fuse into one the two sensations, which do not arise in the extra-subjective brain, but in the subjective feeling, that is, in the soul, whose simplicity alone can explain how two sensations, in all respects similar in position in the fundamental feeling, are necessarily changed into one, because in the soul there is no space to divide them and make them appear two. Moreover, the same thing is proved by the experiment made by me without pieces of glass, by merely fixing my eyes upon a piece of paper painted in two bars with different colours, in such a way that by the crossing of the axes of the eyes the one colour falls upon the other, and becomes modified by the other, just as the different colours of two transparent pieces of glass placed the one above the other are modified (See *Anthropology*, no. 107).

As to the doubleness of the sensation given by the two ears, it is acknowledged even by Magendie: "It has been said," he writes, "that we make use of only one ear at a time; but this is incorrect. When we are trying to judge of the direction of a sound, that is, to tell from what point it comes, we are obliged to make use of both ears, because it is only by comparing the intensity of the two impressions that we can recognise the point whence the sound starts. If, for instance, we stuff one ear completely, and a slight noise is made at some distance in a dark room, it will be impossible for us to judge of the direction of the sound, whereas we can do so by using both ears" (*Précis Elémentaire de Physiologie. Action simultanée des deux appareils de l'Ouïe*). How then does he come to say afterwards that the brain receives only one sensation?

* *Ibid.*

plain that, besides these organs, there must be one simple principle in which the sensation itself has its existence. It is manifest that this simple principle can be neither one of the organs, since one of them does not produce the sensation, nor all the organs together, since the sensation is one and not many. To so many extra-subjective phenomena inherent in different organs, as their particular modifications, there corresponds a single subjective phenomenon. This, therefore, must have a single simple principle, which receives a single simple modification parallel to those many distinct and extended movements.

452. Finally, the sensitive organs, to which special classes of sensations correspond, are many. When one or another of these organs is destroyed, one or another of these classes goes with it, but not all. The organs, therefore, serve to give birth to sensation with a certain independence of each other. But the principle that feels is always the same; the various classes of sensations all arise equally in it. It cannot, therefore, be an organ or any modification of an organ; it must be something that is responsive to all the organs equally; and this is the subjective principle, to which belong unity (*unicità*) and simplicity, a principle, therefore, essentially different from the extra-subjective principle, which has the contrary properties of multiplicity and extension.

CHAPTER VIII.

SOME OF THE PROOFS FOR THE SIMPLICITY OF THE SOUL OFFERED BY THE ANCIENTS COINCIDE WITH THOSE ABOVE PROPOUNDED.

453. With these proofs of the simplicity of the sensitive soul we may compare those adduced by the ancients, which, when translated into our language, will receive new clearness.

Of course, even what I have said up to this point does not pretend to be new. It is only something which I have repeated in new form in order to render it more easy of intelligence to our contemporaries.

I. A proof of the simplicity of the soul was by the ancients deduced from the fact that it is present in every part of the body, as we have seen above. An author of the sixth century writes: "Do you admit that the whole soul diffuses itself through each member, or that there is more of it in one member and less in another? I believe that it is all in each member of the body, because, though it is circumscribed, I do not believe that it is composed of parts in any way, since it remains entire even when the body is deprived of some of its members." So says Joannes Maxentius.*

Now, this proof is extraordinarily cogent, when it is proved that the soul is truly present in every part of the body *per contactum virtutis*. But it is exactly on this point that doubts have been raised, and these doubts have weakened the proof in the estimation of men. On the other hand, a careful examination of the manner in which the soul feels, restores and redoubles its vigour. From

* *Dialog. II, Contra Nest.* (anno 505).

this examination it resulted that continuous extension cannot have its existence except in an unextended being. Does it not follow from this that the soul is in all parts of its body? Of course. It is in the highest degree true that its sensible body, in so far as it is felt, is in it as in a simple principle, through a peculiar relation, which we have called *sensility;** at the same time we must once more observe that it is in a body felt subjectively that all the extra-subjective phenomena of life are manifested.

Hence, it is manifestly the soul that imparts to the body its wonderful unity. "Admire," says St. Basil, "the Artificer and the manner in which He has united to thy body the efficient power of thy soul, as it were by a kind of conjunction, so that, invading even the outermost particles of it, and pouring out its virtue in it, it reduces even the most widely separated members to a single concordant and sociable co-operation."†

454. II. Aristotle infers the simplicity of the soul from the fact that it knows all bodies without distinction.‡ "Because," he says, "if it were a determinate body, it would be unable to know other bodies" (*παρεμφαινόμενον γὰρ κωλύει τὸ ἀλλότριον καὶ ἀντιφράττει*). This argument St. Thomas sets forth in this way: "'That which is capable of knowing several things, cannot have anything of them in its own nature, because what was naturally there would prevent the cognition of the other things. The case is similar to that of the tongue of the sick man, which, when infected with choleric and bitter humour, can perceive nothing sweet, but finds everything bitter. Hence, if the intellectual principle had in it the nature of any body, it would be unable to cognize all bodies, because we must observe that every body has a determinate nature. It is, therefore, impossible that the intellectual principle should be a body. In like manner it is impossible that it should understand by means of a corporeal organ, since, if the

* *Anthropology*, Bk. II, sec. i, chap. ix, art. i; nos. 230-233.

† *Homily on* "Attende Tibi."

‡ *De Animâ*, III, vj, 3; 429 a 18 sq. Ἀνάγκη ἄρα, ἐπεὶ πάντα νοεῖ, ἀμιγῆ εἶναι.

contrary were true, the determinate nature of that corporeal organ would prevent the cognition of all bodies."* On this argument a thousand things were said by the Schoolmen; but many considered it not cogent. For us, on the contrary, it becomes most cogent, if we only carefully explain the ground of it. This argument must, first of all, be used to prove the simplicity of the sentient principle, not that of the intellective one, which follows as a natural consequence, since the sentient principle is that which first perceives real bodies, whereas the intellective principle only apprehends and affirms them as felt. If the sensible perception of bodies could be explained on the supposition that the sentient and percipient principle were corporeal, the intellectual operation, which comes afterwards, would cause no further trouble; it would receive its matter as it was given to it. Now, that the sentient principle cannot be corporeal, is proved in this manner: If it were a determinate body, it would never feel either its own extension or that of anything else, because it would not be whole and identical in each part, and, hence, it would not feel any of the phenomena which manifest themselves in extension. This is the same thing as saying that it would not feel in any way. This is exactly the first proof that we have given of the simplicity of the sensitive principle,† and it is unanswerable.

* *Sum. Theol.*, Pt. I, quæst. lxxv, art. ii.

† *Anthropology*, Bk. II, sec. i, chap. vij, art. 1; nos. 94-103.

CHAPTER IX.

HOW THE SENSITIVE SOUL MAY BE MULTIPLIED, ALTHOUGH IT CANNOT BE DIVIDED.

455. Knowing that the sensitive soul is simple, we likewise know that it is indivisible.

Some of the Schoolmen maintained that the souls of beasts generally were extended and divisible;* others distinguished between perfect and imperfect animals, and maintained that, whilst the souls of the former were indivisible, those of the latter were divisible. Even Suarez in several places speaks of divisible souls, "*quas*," he says, "*in multis viventibus esse non dubito, et in omnibus præter hominem probabilissimum censeo.*" †

456. Now, it seems to me plain that these writers came to this conclusion simply because they did not consider that the soul is only the principle of feeling (the sentient principle), and that it is essential to a principle that it should be simple, since a principle that is not simple would be no principle at all. They ran into this error, not from any want of intellectual power, since some of them pos-

* Duns Scotus, *Comment. to the Sentences of Peter the Lombard*, Bk. IV, Dist. xliv, quæst. i, art. 1; Durando, Bk. I, Dist. viii, 2 p. dist. quæst. iii, n. 10; Capreolo, Bk. II, Dist. xv, quæst. i, ad ultimum contra ultimam conclusionem; Marsilius, Bk. II, quæst. xi, art. 1, and *De Generat*, quæst. xi and xii; Ægidius, Bk. I, Dist. viii, 2ª p. quæst. v; Pomponazzi, *De Nutriente et Nutrito*, Bk. I, chap. iv; Pietro di Mantova, *De Primo et ultimo Instanti;* Janduno, *De Anima*, II, quæst. vi; Apollinare, *De Anima*, quæst. vi; Sassonia, *De Generatione*, I, quæst. x and xi.

† *De Animâ*, Bk. I, chap. ii, n. 19. See also, *Disput. Metaph.*, d. xv, sec. x, n. 32. In the thirteenth chapter of the first book of the *Treatise on the Soul*, he undertakes to show that the indivisibility of the souls of perfect animals may be maintained, at the same time holding that those of imperfect animals are divisible; but Baldassar Alvarez added the note that this was done merely out of respect for St. Thomas, who holds that opinion in regard to the perfect animals.

sessed that power in the highest degree; but because the *method* of investigation had not been perfected in the age in which they flourished. Hence it was that, instead of examining the soul directly by internal observation, they undertook to reason about it, without having carefully observed it, applying to it the general principles of ontology, form, matter, &c., which can be applied only to an entity which is previously well known through observation. They therefore ran upon the very rock on which we every day see our metaphysical writers, who are much less excusable, make shipwreck, when they undertake to answer the question: What *must* the soul be, in order to satisfy our ontological principles? (which means, their prejudices) rather than this, which is the only one that the philosopher has any right to ask: What is the soul? When they have found out what it is, they are then in a position to deduce the true ontological principles expressing the order of universal being.

457. Even in ancient times observations had been made on the conservation of life in bodies maimed or divided. The great observer, Aristotle, had classified animals into perfect and imperfect, and with great sagacity had said of the former, that they were "like many animals bound together."* He had also observed that tortoises live a long time after their hearts are removed. Averroès relates that he once saw a ram walk without its head, and states on the authority of Avicenna that a headless bull walked several steps.† Similar facts are reported by Tertullian,‡ St. Augustine,‖ and others.

Now, if, instead of directly observing the soul as it is given to us in our own experience, we undertake suddenly to apply ontological reasoning to such external and extra-subjective facts, we shall inevitably fall into the error of making sensitive souls extended and divisible. We shall reason thus: If a polyp divided into parts becomes several living animals, either the original soul has itself

* *De Juvent. et Senect.*, chap. i.
† *Physica*, VII, text 4.
‡ *De Animâ.*
‖ *De Quantitate Animæ.*

been divided, or else it has perished and, instead of it, several others have been infused. Were these produced by the corruption of the original one? Did they issue from matter? Were they created by God? Numberless difficulties arise, to escape from which we yield to the irresistible temptation of saying what seems most easy, namely, that the original soul has simply been divided and that the new souls are so many parts of it.

458. If, on the contrary, we apply observation, and from it, combined with accurate reasoning, draw the conclusion that the substance of the soul consists in the principle of feeling, will it not be true that in every animal the sentient principle must be one and simple, and that there are as many animals as there are sentient principles? Do we not see at once that the extended is merely the felt, and that it is only the extended that can be conceived as susceptible of division. Do we not then see that, if division can take place only in the extended, it cannot be conceived as taking place in the soul, because the soul is the sentient, and, therefore, the opposite of the felt? I know that some persons will marvel at this assertion, and, taking their stand on their imperfect ontology (because every man creates an ontology of his own, deriving it from the nature of bodies, as if these were the sole beings from which the nature and intrinsic order of all being could be derived), come forward with numerous objections, all beginning with: How is it possible? But I reply: The mere fact that we do not know how a thing is possible does not hinder it from being a fact, provided it is given in experience. I give the same reply as the direct logic of St. Augustine gave to Evodios, who, in connection with the very subject which is now before us, met his argument in favour of the simplicity of the soul with the fact that, when polyps are divided into parts, each part continues to live. He says: "In the first place, I say that, even if it remains a profound mystery to us, why, when we cleave certain bodies (of animals), these facts take place, we must not, merely for that reason, be so far disconcerted as to consider

arguments false which beforehand seemed clearer than the sun. Must we, for that reason, let ourselves fall away or depart from the contrary conviction, whatever it may be, which we have learnt with all solidity, and admit to be most true?" * Indeed, the objections which may be raised against a truth, even if they appear insoluble, can never, according to the laws of good logic, destroy what has been directly and solidly shown to be true. On the contrary, every good theory, merely because profound and recondite, presents to the majority of people the greatest difficulties; but the wise either solve these, or failing to do so, preserve unshaken their confidence in that truth which they had previously known.

459. And yet he who draws his notion of the soul and its activity solely from consciousness and internal observation, and thence obtains the results that impose silence on the presumptuous prejudices for ever murmuring in the mind, will find the matter not so very hard to conceive as it seems at first sight. The truth is, he will obtain the results already enumerated, viz.:

1.° That the extended felt can exist only in the simple and unextended sentient.

2.° That between the sentient and the felt nothing can intervene, and, therefore, the two form a single, simple feeling, having, as it were, two poles, the one unextended, which is its principle, the other extended, which is its term.

3.° That, therefore, the unextended sentient is in every part of the felt extended, for the simple reason that no part of it could be felt if the sentient were not in it, since the sentient and the felt form one single feeling.†

4.° That the sentient is limited by the felt, which is the term of its act, so that, wherever the felt is, there the

* *De Quantitate Animæ*, chap. xxxj.

† St. Thomas proves that the soul is in all the body because otherwise the whole, that is, the compound, "*non esset unum quid naturaliter, sed compositione tantum.*" He proves, further, that it is all in every part of the body, because, being simple where it is, it must have all the perfection of its species, since "*substantiæ et formæ simplices habent perfectam speciem per se ipsas*" (*et non ex conjunctione principiorum essentialium*, from which compounds derive it). *Quæst. de Anima*, art. x.

sentient also must necessarily be, and where the felt is not, neither can the sentient be, since the sentient feels only through the felt, and the felt is felt only by the sentient, as was explained above.

5.° That, underlying and adhering to the felt, there is a corporeal extended matter, to which the felt is bound and upon which it depends,* so that, if this matter be removed, or change extension, the felt does the same.

6.° That, therefore, an extended felt may be divided into several parts by the division of its matter, and consequently there may be formed two or more felts (felt terms) having no communication with each other.

7.° That it is impossible *a priori* to discover any reason why, if the felt of a given extension divides into two or more, these should cease to be felt, since feeling is in itself in no way dependent upon the quantity or shape of extension. Hence, just as before the division of the felt into two, there was feeling, and, therefore, also the sentient, in every point of the extension, so also it is natural that there should remain in every point of the divided and discontinuous parts a feeling, and in every point of them the sentient principle.

8.° But, since the sentient principle, though all existing in every part of every felt continuous, is one only in so far as the continuous is one and without parts, it follows that, for the same reason, when the felt divides into several *continua*, the sensitive activity will also multiply itself, since the sensitive activity does not now reside in a single *continuum*, but in several disunited *continua*.

460. This multiplication of the sensitive principle is very

* Although Suarez erroneously admits the existence of some divisible souls, still he agrees that from the mere fact that some souls are dependent upon matter, it does not necessarily follow that they are divisible. "There is no necessary connection," he says, "between these two principles, *divisibility* and *dependence on matter*; for, although indivisibility goes along with immateriality, still, it does not follow that the former cannot occur without the latter. On the contrary, there is no logical incompatibility between indivisibility and dependence on matter. The truth is, it requires a more thorough perfection to make a form independent than to make it indivisible, as we see in the case of a spiritual action, which is indivisible and yet dependent. Hence indivisibility may unite with dependence." *De Anima*, Bk. I, chap. xiii, 9.

difficult to understand, because our fancy readily imagines that this principle is a kind of complete and subsistent being without the felt—a kind of minute corpuscle. But the fact is not so. We must blot out from our minds this fanciful being, and concentrate our attention upon the nature of the thing: we must consider that in nature there is only the felt; that to the felt, as felt, there is essentially united the sentient, and that this feels only the continuous felt, without feeling itself, because the animal felt has no reflection upon itself: indeed, this is so true that the monosyllable *self* is not applicable to it. If that principle, therefore, feels only the felt, and if it is sentient only in so far as it feels, it seems clear that, when the felt is divided into two *continua*, the sentient will feel two *continua;* but, not feeling itself, it will not be able to preserve its own identity in the two, because they are divided. This is exactly what we mean by multiplying.

461. We must, therefore, conclude that every sensitive soul is simple and indivisible; but that, nevertheless, it is multipliable.*

* St. Jerome agrees that the souls of beasts are propagated *ex traduce*, that is, *ex traduce carnis*, but denies that that of man is so: "*Utrum ex traduce*," he says, "*juxta bruta animalia?*" (Ep. lxi, *ad Errores Jo. Hieros*). But the expression *ex traduce* does not properly express the origin even of sensitive souls; for these multiply by the mere *division of the felt*, without requiring anything further, although this division takes place in various modes and always with certain conditions.

CHAPTER X.

CONTINUATION.—ON THE MULTIPLICATION OF POLYPS.

462. When Trembley (1740) and other naturalists of last century began anew to observe what had been already observed by the ancients, viz., that hydras and other polyps multiply by means of buds, which grow on them spontaneously, and by sections, both natural and artificial, they were transported with wonder, on account of the imperfect concept which up to that time had existed with respect to the positive nature of the soul.

463. We have observed in the *Anthropology* * that the manner in which polyps propagate does not in any way differ from the general law of propagation, which is a fact equally wonderful in all animals, whether viviparous, oviparous, gemmiparous, fissiparous, or multiplying in any other way. And it is true that every mode of generation is due "to the detachment of some living part of the animal, which part, even after it is detached, preserves life, and becomes a new individual of the same species."

The differences between the various modes of generation are due solely to the "diverse manners in which the living part destined to be a separate living being, and to become a perfect individual of the species, separates from the original animal," and to the different conditions which this detachment requires; but such differences are only accidental, and the law always remains true, viz., that generation is merely "the detachment from the animal of a living part, which remains alive and individualizes itself."

464. The whole question, therefore, reduces itself to

* Book II, sec. i, chap. xv; nos. 323-349.

this: What are the conditions necessary in order that a living part, detaching itself from an animal, may not lose its life after it is detached, but may individualize itself? And we believe that even these conditions vary in the different animals only in so far as accessories and accidents are concerned, and that they are always reducible to a single condition, to a law specifically the same, which we have elsewhere explained in these terms.* "In the living part detached from an animal, life is preserved every time that this part contains such a combination of all the mechanical, physical, chemical, organic, and vital forces as continuously to preserve the matter of feeling in that state wherein it is fitted to perform the office of term to that *specific feeling* which constitutes the species of the animal."

The variable term in this formula is, "the specific feeling which constitutes the species of the animal," and to the variability of this term we must look for the varieties of animals, and hence also for the varieties observed in their modes of propagation.

465. As, therefore, the essence of animals consists in feeling, so the specific and really philosophical classification of them is that which recognises the varieties of their fundamental feeling.†

466. The variety in this feeling is discovered through the extra-subjective phenomena which accompany it, and which, though not *immediate effects* of the feeling, are, nevertheless, phenomena collateral to those of feeling and, therefore, signs which give true information concerning it. Nevertheless, in point of *extension*, the two sets of phenomena, the extra-subjective and material, and the subjective and sensible, are identical, because feeling diffuses itself in that space in which the corresponding extra-subjective

* *Anthropology*, Bk. II, sec. i, chap. xv, art. 2.; nos. 326-331.

† It is also from feeling that St. Augustine infers that the soul is in every part of the sensible body, because, wherever the soul feels, there the sentient principle, which is the entire soul itself, is. "*Non mole diffunditur per spatium loci*," he writes of the soul, "*sed in uno quoque corpore, et in toto tota est, et in qualibet ejus parte tota est; et ideò cum sit* ALIQUID IN QUAVIS EXIGUA PARTICULA CORPORIS QUOD SENTIAT ANIMA, *quamvis non fiat in toto corpore, illa tamen* TOTA SENTIT, *quia totam non latet.*" De Trinitate, VI, vj.

phenomena appear (although the extension is felt in a different way in the two cases). From this we drew the conclusion, that it is one and the same force that, acting in the soul, produces feeling and, acting upon itself (on the matter of feeling), produces the extra-subjective phenomena.

467. Now the fact is that, when certain living parts detach themselves from animals, they sometimes become living animals, sometimes they do not, but perish. We have ascribed the cause of this difference to this, that, in the former case, the matter of feeling remains in that normal state which is necessary in order that it may be the term of that particular animal feeling, whereas, in the latter case, the material loses that normal state. Now the normal state consists in a proper organization, which must be such as to preserve the unity of the feeling.

CHAPTER XI.

CAUSES OF DEATH AND GENERATION.

468. And here several delicate and important questions may be put.

Question I. How does the living matter detached from the animal lose that normal state of organization which fits it to become the term of a single feeling? Before it detached itself, it certainly had the organization necessary, because it was felt and, hence, it likewise contained all the sentient principle, all the soul, which is where it feels. Now, how can even a detached part retain this condition?

I reply: It is impossible to deny that a felt part which detaches itself from the body of an animal, has, considered in itself, a state of organization fitting it to be felt, and that nothing can show that it loses this state by merely being divided from the body. But we must observe that the sensitive principle not only feels, but is in continuous action and produces continuous movements in the living body felt by it, so that this term of its feeling has a continual, internal movement, which, as we said, keeps the sentient in continual excitation.* These movements carry an incessant change into the most intimate organization of matter, and make it pass from one state to another without pause. In order, therefore, that the normal organization may be preserved, these new states must always remain normal states; the movement must always revolve in a circle, and, though altering the organization, must not destroy it, but renew it, or even improve it. Now, these movements produced by the soul are of

* See this question touched upon, *Anthropology*, Bk. II, sec. i, chap. xiv, art. 6; nos. 318-322.

two kinds, proceeding, sometimes from what we have called the *vital instinct*, sometimes from what we have called the *sensual instinct*.* But the movements of the *sensual instinct* interfere with those of the *vital instinct* in certain cases, disturb them and thus disorganize the body, which the vital instinct tends to organize better and better, so that the sensual instinct becomes *the first cause of death*.†

469. Moreover, the vital instinct itself, being the *organizing* principle, must maintain a struggle with brute force,‡ whose processes, mechanical, physical, chemical, &c., go on unceasingly alongside and independently of it, and, hence, sometimes go in the direction opposite to that of the organization which it tends to constitute. If the processes of this brute force are contrary to the organization to which the vital instinct tends, and operate with greater rapidity and vehemence than the organizing process of said instinct, it is clear that matter more and more loses the organization necessary for animal life, and this is *the second cause of death*.

Death is always due to one or the other of these causes.

470. Applying, then, this theory to the phenomenon of death in general, we can understand why certain parts detached alive from the living body die in a very short time, whereas others, after they have been detached, for a considerable time *continue* to show the phenomena of life, but finally die; why it is that certain parts die slowly, even when they remain united to the entire living body, being

* *Anthropology*, Bk. II, sec. ii, chap. x; nos. 401-415.

† In order to convince ourselves that the *sensual instinct* is sometimes the cause of death, we have only to consider it in those cases in which it produces death with the greatest rapidity, and in the lower animals, because in man this instinct is stimulated and altered strangely by the abuse of intelligence. Now, does it not happen with many insects that they die in the very act of giving life to other individuals? And what else but the sensual instinct leads them to perish? Naturalists have observed that the species of fly called *tipula* sometimes dies through merely approaching the female. "*Il faut songer*," says Virey, "*qu'engendrer, c'est dépouiller sa propre vie et abréger ses jours; c'est faire en quelque sorte son testament; c'est donner la preuve qu'on est mortel, puisqu'on ne communique la vie qu'au prix de la sienne.*"

‡ We shall see elsewhere what is meant by *brute force*: here it is sufficient to assume the ordinary notion.

affected by those processes of internal alteration which lead to death (examples of this we find in gangrene and paralysis); why some diseases (and all diseases are merely a series of the processes of which we are speaking) lead the whole body to death, and others to health; and, finally, why some parts, when detached from the animal, remain permanently alive, and renew that portion of organization which they have lost, or, if they have an entire organization, develope and perfect it. The last case receives the name of generation. We can understand, moreover, why it happens that, when certain parts detach themselves from the body, they live, while the body from which they are detached dies. The male bee, for example, after having impregnated the female, in which it leaves its own organs of generation, immediately dies. Very many insects likewise, for example, the scarabæus, the ephemeris, the cochineal, die after impregnation. In this case, in the parts which are detached, and which constitute the new individual, there take place acts which are capable of keeping them alive, and in the generating animal there take place, for the same reasons, processes more or less rapid, which lead to death.

CHAPTER XII.

CAUSES OF THE DIFFERENT ORGANIZATIONS OF ANIMALS.

471. *Question II.* But it remains to be seen why the vital instinct is not content with any matter indifferently, but requires to have it organized in a particular way, in order to put in act the animal feeling. In other words, it remains to be seen, why the term of feeling must be one aggregate of matter rather than another, one choice, one tissue, rather than another.

If it is true that, in the animal, the soul is the only substantial form of the body; if it is true that the felt exists in virtue of the sentient; if it is true that feeling constitutes the animal as a being, it must likewise be true that the *specific* fundamental feeling is that to which we must look for the reason which renders necessary a specific organism for the animal, and that it is not matter that contains the ground of the various kinds of feeling. Let me explain what I mean. If the aggregate of matter were that which determined the complex feeling, the result ought to be that to every compound of matter there would correspond a single complex-animal feeling. But, if the feeling is what determines the compound and aggregate of its matter, these compounds or aggregates will be exactly as numerous as the fundamental feelings of which we are speaking can be.

472. It remains, therefore, to inquire why the fundamental feelings constituting as many animals are limited in kind and number, and are not as numerous as can be conceived?

In this inquiry we are assisted by the data of internal observation and experience, which must be accurately collected.

One of these data is, that the feeling of the animal

receives a more or less satisfactory state from the state of the body, and that it also experiences pleasures and pains according to the condition of the body and the variations and movements which take place in it.

Hence we gather that every fundamental feeling contains certain laws, whereby it is modified, sometimes receiving a mode of perfection, sometimes a mode of deterioration. If a fundamental feeling is susceptible of a mode of perfection, its action will tend toward that, and turn away from the opposite extreme. This perfect mode or state of the feeling is certainly something that takes place in it, and not outside of it; whence the vital principle and the feeling itself, supposing it to be active and to have a continual tendency to settle and compose itself in its most perfect, most natural, and most satisfying mode of being, will incessantly move and modify the felt, which is equivalent to saying that it will move and modify the body and, consequently, the matter that underlies it. Thus, the vital and sentient principle, in order to place itself in its most natural state, in its most agreeable mode of being, arranges, composes, refashions itself, and with this effort it organizes the matter in which it works, or to which through contiguity it can extend its operation; at least, it tends to subject it and organize it in the way that is most agreeable to itself. It is, therefore, to the fundamental feeling, the source of animal activity, that we must look for the stamp of the species, the plastic force or the reason which makes every animal reproduce another animal like itself.

473. It is in this way that we understand and explain the *vis essentialis* of Gaspar Friedrich Wolf,* the *epigenesis* of Aristotle, Galen, Descartes, Harvey, G. Tuberville Needham and Müller; the *nisus formativus* of Blumenbach, Barthez, and others; the *plastic forms* of Cudworth; the attraction of parts and superstructure of organs of Maupertius; the power of creating and organizing the fœtus, which Stahl attributes to the soul; and the *Archæus* and formative spirit of Van Helmont. Of course, these authors

* *Dissertatio sistens Theoriam Generationis*, Halle, 1774.

are not fully in agreement, and they frequently say things that are manifestly false, and use altogether improper expressions in order to explain their thought (for example, Van Helmont's *seminal soul*, having its seat in the matrix); but they all contain an undeniable truth, viz., that in nature there is an organizing principle. Now, this is what we think we have found in the vital principle, and in sensual instinct operating in accordance with it.*

* The ancients, in attributing the generation of beings to love, indirectly recognised that in *feeling* alone we must look for plastic force, or *plasto-dynamia*, as J. Fred. Lobstein called it (*De l'organisation de la matière dans l'espèce humaine*, in Millin's *Magazin Encyclopédique*, 1804); because love is feeling. The Epicureans, who attributed this formative and organizing force to matter, without the intervention of the Creator, did, at bottom, nothing more than attribute a feeling to matter, as is shown by the fact that they undertook to explain all the changes in the universe by the principle of love, by the sympathies and antipathies of things. It is true that they confounded attraction and repulsion, which are extra-subjective facts, with the true subjective cause (feeling), by a play of fancy. The result was, that they used the two series of phenomena indiscriminately, and hence could never distinguish, or keep constantly distinct, the concept of what is subjective from the concept of what is extra-subjective. But we see plainly that their thought started with the subjective principle, when we observe the use they made of the word *love*. There have not been wanting even moderns who have had recourse to feeling and to love in order to explain generation. These at the same time extended their theory to plants, imitating even in this the mode of expression of the Epicureans. Thus Virey does not hesitate to write: "En effet, un animal, une plante, ne vivent que parce qu'ils ont reçu l'existence et l'organisation de l'amour de leur parens. Nous prenons tous notre origine dans le sein maternel; notre vie n'est qu'une émanation de celle de nos pères, elle n'est que le fruit de leur amour. Notre existence en tire entièrement sa source, plus leur amour a été ardent, plus notre vie est énergique; puisque dans la vigueur les individus produisent une lignée plus robuste et plus vive que celle des parens trop âgés ou trop jeunes. L'amour est tellement la source de la vie, qu'il est l'époque de la force, de la vigueur, de l'activité et de la reproduction. L'amour pris dans sa plus grande latitude n'est donc autre chose que le principe de la vie de tous le corps organisés, c'est lui seul qui préside aux générations. Voilà cette Vénus génératrice, célébrée jadis par les philosophes et les poètes:

'Per te quoniam genus omne animantum
Concipitur; visitque exortum lumina solis—
Illecebrisque tuis omnis natura animantum
Te sequitur cupide, quo quamque inducere pergis—
Omnibus incutiens blandum per pectora amorem,
Efficis ut cupide generatim sæcla propagent.'

Lucret. I, 4-21.

"Ainsi l'amour est l'arbitre du monde organique, c'est lui qui débrouille le chaos de la matière et qui l'imprègne de vie. Il ouvre et ferme à son gré les portes de l'existence à tous les êtres que sa voix appelle du néant, et qu'il y replonge. L'attraction dans les matières brutes est une sorte d'amour, ou d'amitié analogue à celle qui reproduit les êtres organisés. Ainsi la faculté générative est un phenomène général dans l'univers, elle est représentée par les attractions planétaires et chimiques dans les substances brutes, et par l'amour ou la vie dans les corps organisés."—*Nouvelle Dict. d' Histoire Naturelle*, art. *Génération*.

CHAPTER XIII.

LAW ACCORDING TO WHICH THE SENTIENT PRINCIPLE PERFORMS THE ORGANIZING FUNCTION.

474. *Question III.* The fact cannot be denied that the feeling of the animal has various pleasant or painful states, with a gradation and variety of pleasure, and a gradation and variety of pain. Neither can it be denied that it is proved by experience that for every state of animal feeling there is a corresponding condition of the body, which is its term. Indeed, since the state of the animal feeling is always determined by that which it feels, and this feeling feels nothing except in the corporeal extended, it is plain that the comfort and discomfort of the sentient principle must depend upon the conditions of this corporeal extended, that is, upon the felt. Finally, it cannot be denied that in feeling there is an activity, and that this tries to collect and arrange itself in the mode that is most agreeable and, therefore, most natural to it. Hence, it acts in the body, its term, with an activity which produces all the motions of the animal, and, to take a familiar example, makes an insect, when laid on its back, struggle to turn over and get back to its natural position. These three facts cannot be denied. But it remains to be seen, even after all this, what is the reason why the animal feeling has one perfectly pleasant state, and others less pleasant, and others more and more disagreeable, and, finally, why it ceases to exist.

475. If we consider the fundamental and substantial feeling as a being specifically determined, the only reply we can make to this question will be, that the reason of its different pleasant and unpleasant states lies in itself, is the

law of its nature, proceeds directly from the intrinsic order of its constitution. Every being has an internal order, and the ultimate ground of this order merges in the intrinsic order of essential being. This essential being and its order form the prime fact, which contains the sufficient ontological ground of all other facts, beyond which no other ground of any kind can be sought.

476. But, since the animal feeling, although one and simple in its principle, offers to observation and analysis a peculiar composition and multiplicity, resulting from certain internal actions and passions, there still remains open a sort of door, whereby we may enter and search its internal constitution for the reason of its accidents and its changes. Let us, therefore, try if we can find out its nature by spying at it, so to speak, through the chinks.

477. Here I presuppose, as demonstrated and certain, the following principles:

1.° The animal feeling is in its essence pleasurable, is the activity of enjoyment, so that the less it has of the activity of enjoyment (activity of enjoyment is equivalent to fundamental enjoyment), the less it has of its own proper entity.

478. 2.° Feeling, the activity of enjoyment, or the fundamental enjoyment, may be diffused more or less equally in a *continuum*, and may be more or less condensed, so to speak, in a physical point of said *continuum*, or in several points acting as centres of enjoyment and activity, whether caused by incessant excitation or in any other way. To say that the fundamental feeling is concentrated or condensed is the same thing as saying that it is more intense in one place than in another.

479. 3.° The more continuous and intense the fundamental feeling is, the more it has of instinctive activity.

4.° In the perfect animals the fundamental enjoyment is most concentrated and intense, and the functions of life are most manifold. On the contrary, in the imperfect animals the primitive and fundamental enjoyment is less concentrated, more uniformly diffused, or, instead of one centre,

has several, whence also the activities, the functions and the signs of life are more rare and less observable. It is to this greater or less concentration, greater or less intensity, of the primitive and fundamental enjoyment that I attribute the *specific difference* in the fundamental feeling constituting the animal, and it is, therefore, the basis of the true and philosophical distinction between the various classes or species of animals.

480. 5.° The different fundamental feelings have, corresponding to them, in the extra-subjective world, different selected aggregates of matter, different elaborations of it, different organizations. If the proper matter is removed, or not sufficiently elaborated, or if the proper organization dissolves, the fundamental feeling suffers more or less, and even ceases, that is, breaks up into several feelings, from losing the unity of its term.

481. Presupposing all this, I hold that the specific agglomeration of feeling given to man by nature in the first instant of his existence (or, at least, the feeling considered with reference to its type or theme) can never be increased by the particular activity of the animal, but that this activity is entirely devoted to preserving it, by struggling against contrary forces.

This activity, moreover, tends to seek pleasurable transient sensations (sensual instinct); but these sensations do not make the fundamental feeling collect more in any point, being only secondary acts of the feeling itself.

482. It is true, of course, that the animal develops; but I consider this development to be the effect of that activity whereby it tends to preserve itself (vital instinct), to preserve the *basis of its fundamental feeling*, united with that activity whereby it tends to seek transient sensations (sensual instinct), although the direct end to which these two activities tend is not development or growth. When the fundamental feeling tries to preserve itself according to its type, and to put forth its acts, that is, transient sensations, it finds that it cannot do so without those vital movements, which for a brief time develope and perfect it, but, when the

period of perfection is past, make it decay and grow old; so that development and decay are consequences of the use of the vital and sensual activities, not the proximate end to which these two branches of animal activity tend.

483. We might even conceive the full development of the animal as the state of the highest perfection, and suppose that only in such a state the fundamental feeling had reached its greatest intensity in accordance with its natural type. If we do so, we must assume, as the constant type or specific stamp of the animal, *the proportion in which the feeling is distributed in the various points of its term*, and, hence, the nature and character of the harmony of action proper to the animal. The truth is, where the sentient principle is one, there also the action which originates in feeling is one and completely harmonious. But, since the activity of the animal is greater where the feeling is greater, if feeling has a single centre, this action will likewise have a single centre; and, if the feeling has several centres, so will likewise the animal activity, and thus in the various points of the felt there will be greater or less activity, according as there is greater or less feeling —that is, feeling of excitation, which presupposes the feeling of continuity. Now, if this proportionate distribution of feeling always remains the same, the character of the harmony of the animal activity will also remain the same, in all the states which the animal successively assumes in the course of its development.

484. Now, if we take the proportionate distribution of feeling and activity as the distinguishing characteristic of species, we must recognise it to be a constant law that the animal activity—at least, if it is not perturbed by foreign forces and accidents—tends neither to change nor improve this characteristic and primitive distribution of feelings and activities, but to preserve it and use it as a source of pleasant sensations; but change follows afterwards, I would almost say, *præter intentionem*.

485. Recognising this law, we may deduce from it the following corollaries:

I. That, as often as the sentient and active principle tending to preserve the type of the fundamental feeling and to draw special pleasurable sensations from it, operates in matter, this either resists it and strives to withdraw itself by means of its forces, mechanical, physical, chemical, &c., or else obeys it and co-operates in some way with it. In the former case there arises the phenomenon of pain, which is the struggle of the sentient principle with its matter and the incipient victory of the latter, whereby the sentient principle is checked in its tendencies, and feeling is reduced to a condition contrary to its nature, which is to enjoy. Then feeling becomes maimed, dwarfed, wearied in its incessant endeavour to reach that which it cannot reach, and so becomes sad and downcast. If, on the other hand, matter obeys, and its brute forces co-operate to further the ends of feeling, the contrary effects take place in it.

486. II. That, if the fundamental feeling is so beaten in the contest as to deteriorate even in what forms its species; if the specific condensation of feeling and the consequent harmonic activity become impossible, then that specific feeling likewise becomes impossible, which is equivalent to saying that the animal dies.

487. III. But if there were an animal whose specific character was the completely equable diffusion of feeling, without condensation of any sort, it ought to multiply itself into as many animals as there were particles of matter in its composition, since in each part there would be an equable diffusion of that feeling which constituted the species of that animal. It would likewise be understood how the vital principle might easily close all the wounds thereby inflicted, if the external conditions, necessary in every case to its nutrition, were realized.

488. IV. It follows, further, that animals in which feeling is accumulated in many centres with equal intensity must be easily multiplied by division and reproduced like buds, since there remains in each part a larger or smaller number of these centres. Hence, the

law of their harmonious action, and the proportion in which feeling is distributed remain the same. This explains the multiplication of infusoria; nor is there anything marvellous about the strange way in which the tricod, called Charon by Müller, multiplies itself. This creature's belly inflates like a balloon, first transparent and then opaque, and, finally, bursts with such force as to make the little animal fly into a hundred pieces, each of which becomes a perfect tricod.* There is a close similarity between the explanation given by us and the reason assigned by St. Thomas for the multiplication of the *anellata*. "The *anellata*," he says, "live after they are cut in pieces, not only because the soul is in every part of the body, but because their souls, being imperfect and of few actions, require but a slight diversity of parts, which diversity is found even in the living part that is cut off. Hence, inasmuch as that disposition through which the body is perfected by the soul is preserved in the part cut off, the soul also remains in it."†

489. V. That, if the result of the vital and sensual movements produced by the animal activity were, to change the centre of feeling, or its intension or its type, this ought to be followed by a total change of organization, and an animal ought to transform itself into another without dying. And, indeed, this is what actually takes place in certain living species, for example, in worms, which pass into the chrysalis state and then into that of butterflies.

But the sixth and most important corollary that follows from the preceding theory is the possibility of spontaneous generation, of which we shall speak in the next chapter.

* *Histoire des Vermis*, &c., p. 83, n. 2511.

† *De Anima*, art. x, ad. 15. Aristotle has said of those souls that they have one soul in act [ἐντελεχείᾳ] and many in potentiality [δυνάμει] (*De Animâ*, Bk. II, 2, 8; 413 b 16 sq.). This, however, does not explain their multiplication by division, but merely enunciates the fact in scholastic terms.

CHAPTER XIV.

ON SPONTANEOUS GENERATION.

ARTICLE I.

Various Opinions as to the Fact of Spontaneous Generation.

490. It appears from what has been said that, if we must accept as true that mode of generation, so strongly affirmed by the ancients and so strongly denied by the moderns, called by the former generation by putrefaction, by the latter, spontaneous generation, it would range itself under the same universal law that presides over the multiplication of animals.

In this case, if it should happen that the felt, and, consequently, the matter, of the animal body, being deprived of organization, were unable any longer to preserve the unity of feeling and the specific character of the harmony of its actions, there would occur in these such discord that, instead of all co-operating to maintain the unity of the felt, the one would diverge from the other, and each would tend to constitute a centre of its own.

Now, this internal struggle among the various activities of feeling, arising, as it were, in all points of the felt extended, this disunion and dissolution, would explain, not only the phenomenon of putrid fermentation, but also the formation of the minute animals which would result from it. This mode of generation would differ from the other three or four merely in this, that, whereas the others propagate animals of the same species and transform them, this dissolves animals in order to form others of a different

species out of their shreds and patches—a real *generatio æquivoca.*

491. In the middle of last century, a Catholic priest in England revived the doctrine of spontaneous generation, and undertook to prove it by microscopical experiments.*

From that time on, the doctrine has been advocated by many naturalists, for example, Vrisberg, Otto Friedrich Müller, Ingenhous, Bloch, Lamarck, Treviranus, F. Meckel, Rudolphi,† Bremser, De Blainville,‡ Fray,‖ Carl Friedrich Burdach, Dellachiaie, § &c.; in a word, it has now-a-days become almost a common opinion among naturalists.¶

In a note to his *New Elements of Physiology*, Richerand speaks thus of infusoria: "These living beings, which the eye cannot see without the aid of the microscope, seem to be the product of direct and spontaneous generation. Nature, by means of heat and moisture, gives them birth. We do not know how it employs for this purpose certain imponderable fluids, such as the principle of electricity; still, it is very probable that a small gelatinous mass may, through the combined influences of such causes, transform itself into an organized and living cellular tissue. This is doubtless the way in which monads are formed, as well as that crowd of microscopic animalcules which spring up and move with such activity in a pool of stagnant water. Summer heat seems indispensable to their production, since we never find them in the cold season. Tempestuous weather also favours their multiplication. As Lamarck has well

* John Tuberville Needham. *Microscopical Discoveries*, London, 1745.

† *Entozoorum sive Vermium intestinalium Historia Naturalis*, Berlin, 1819.

‡ Appendix to Bremser's *Traité des Vers intestins*, p. 563.

‖ *Essai sur l'Origine des Etres organisés.*

§ *Compèndio di Elmintologia umana.*

¶ A recent opponent of the doctrine of spontaneous generation is D. C. G. Ehrenberg, whose work was turned into French by Manol. It bears the title: *Traité pratique du Microscope, suivi de Recherches sur l'Organisation des Animaux infusoires*, Paris, 1839. Prof. Medici admits spontaneous generation in the case of animals inferior to insects, but not in insects. See a learned letter of Prof. Secondo Berrutti, addressed to Medici, in which he maintains the spontaneous generation of insects (*Giornale delle Scienze Mediche*, Turin, tom. vi). This letter gave occasion to a learned discussion between several professors—a discussion which may be found in the *Rendiconto dei Lavori della Società Medico-Chirugica di Torino*, presented by Dr. Secondo Polto, in n. xxxiij, and inserted also in the first volume of the ACTS of the same society.

observed in his *Philosophie Zoologique* (Vol. II), the moderns seem to have absolutely rejected the opinions of the ancients with respect to spontaneous generation. It is, of course, true that from the body of an ox there cannot issue animals as highly organized as bees; but the same cannot be affirmed of animals that present a mere rude sketch of organization. The monads among infusoria, and the byssus among the simplest families of algæ, seem the immediate product of moist heat, actuated by the influence of electricity." *

ARTICLE II.

Does the Doctrine of Spontaneous Generation favour Materialism?

492. Spontaneous generation has seemed to materialists to furnish a proof of their system. For this secondary reason, they have violently maintained the theory and chanted pæans of victory.†

For the same reason, those who admit the spirituality of the soul have thought it necessary to attack the doctrine.

493. Both are in error. If the fact of spontaneous generation does really occur in nature, it does not follow, as Cabanis maintained, that pure matter of itself passes into life.‡ On the contrary, we must say that the matter itself was animate, and that the principle of life which was in it, operating in its matter, produced organism. In this way, this great fact would be the most manifest proof of an immaterial principle.

494. A recent physician of the school of Broussais, after alluding to the problem propounded by Becquerel: "How did the transition from inorganic to organic matter take place?" || says, "Spontaneous generations would afford

* *New Elements*, Pref., sec. v.

† *Système de la Nature*, vol. i, chap. ij; Diderot, *Pensées sur l'Interprétation de la Nature*, § xii, lviii, 2; Robinet, *Vue Philosophique de la Gradation Naturelle des formes de l'Etre*, Amsterdam, 1768. De la Mettrie, *Abrégé des Systèmes*. — *L'Homme Plante* — and other party writers.

‡ *Rapports du Physique et du Moral de l'Homme*. Mem. x, sect. i, § ij.

|| Becquerel, *Traité de l'Electricité et du Magnétisme*, vol. i, p. 430.

considerable aid toward the solution of this problem, because, if it were true that dead matter by its own forces could assume an organization, the question would in great measure be solved." * But spontaneous generations would never prove that matter was dead; on the contrary, they would clearly prove that it was alive. †

495. All that is required is a clear concept of body and matter. Body and matter are but the term of feeling. Such is the only notion that men can have of them. They can have no other unless they play with their imagination. Now, the term of feeling requires a sentient principle, which must be altogether simple, since otherwise it would not be a term. The question, therefore, is to catch the notion of body and matter at the moment when man acquires it; before he has been able to alter it with his imagination; and the question thus put is soon answered, because we see at once that wherever there is feeling, there is an essentially simple soul.

ARTICLE III.

Animals Anciently Issued from Matter apparently Brute.

496. In the book which contains the most ancient record of the things of this world, God commands the earth to bring forth plants even before the creation of the sun and the moon. When these luminaries are placed in the sky, He commands the liquid substance to bring forth serpents, fishes, birds; and the waters and the air were peopled. Afterwards He commands the earth to produce cattle, the creeping things that creep upon the earth and

* He immediately adds: "Spiritualists have felt this, and hence have done their best to give currency to the opposite opinion." M. S. Houdart, *Études historiques et critiques sur la Vie et la Doctrine d'Hippocrate*, &c., Paris, 1836.

† F. Bérard, who made sensible notes on Cabanis' *Posthumous Letter* on *First Causes* (Paris, 1824), says in a note to page 60: "Il y a un véritable cercle vicieux dans la production des êtres vivans, dont on ne sortira jamais. Il faut un être vivant pour en produire un autre; la production de la vie suppose toujours la vie; pour faire des organes vivans, il faut de la matière vivante, et pour faire de la matière vivante, il faut des organes vivans: un être vivant ne peut avoir été fait qu' à la fois et de toutes pièces; s'il n'est pas parfait en lui-même, il ne peut pas être."

the beasts of the field, each after his kind; and the earth obeys (*Gen.* I).

Are we to argue from this that the material substances which, at the command of God, produce the animals, were altogether devoid of life? The inference would be as completely absurd as gratuitous. Moses himself says that, even from the creation of matter, the spirit of God fecundated the waters.* This "Spirit of God" was understood by some of the early Fathers to mean the spirit of life that animates things.

497. The reason why it is said that the spirit of God fecundated the liquid matter, instead of the solid, we discover when we observe that it is only subtle matter that is suited to the spontaneous generation of animals; and the reason for this we shall explain further on.

498. St. Theophilos, who was raised to the See of Antioch in the year 168, declares: "By the spirit that moved upon the face of the waters, Moses means that spirit which God gave to His creation for the generation of living things, as the soul to man, uniting subtle with subtle (because the spirit is subtle and the water is subtle), in order that the spirit might fecundate the water, and the water, along with the spirit, pervading all things, might fecundate the creation."† So ancient a testimony is a grave authority.

499. Now, to say that material substance, thus fecundated, may be organized by the living principle into various forms according to circumstances, is not materialism.

When Cuvier, studying fossil bones, found so many species of extinct animals, the palæotherium, the anoplotherium, the anthracotherium, the plesiosaurus, the mega-

* And the Spirit of God moved upon the face of the waters (*Gen.* i, 2). The Hebrew word rendered *moved* properly means *brooded*.

† The Latin translation, which I have before me, renders thus: "*Spiritum autem qui ferebatur super aquas, eum intelligit qui dedit Deus creaturæ ad viventium generationem, velut animam homini, tenue cum tenui conjungens (nam spiritus tenuis et aqua tenuis) ne spiritus aquam,* AQUA AUTEM CUM SPIRITU (and not water alone, as materialists vainly think) *omnia pervadens creaturam foveret.*" Ad Autolyc., II, xiij.

losaurus, the pterodactylus, the ichthyosaurus, &c, it was said that the temperature of the globe, the fecundity of the earth, and the circumstances influencing organization must formerly have been different from what they are now. It was imagined that those extinct species, differing so widely from those now existing, were products of an earth endowed with other virtues, having different atmospheric conditions, &c. Whatever opinion we may adopt in regard to this, be it false as false may be, it will never turn out in favour of materialism. Indeed, even if there should suddenly leap forth from the ground a full-grown mastodon or a rhinoceros, all that would legitimately follow from the fact would be, that there was a vital principle in the ground, and that this was the secret organizer of these huge bodies.

CHAPTER XV.

ON THE HYPOTHESIS THAT ALL THE ELEMENTS OF MATTER ARE ANIMATE.

500. From what has been said the reader may gather that life, the sensitive soul, may be found united to matter, even when it does not appear in external extra-subjective phenomena.

In this chapter we shall put forward the hypothesis that there is sense bound up with all the primitive elements of matter, and inquire whether such an hypothesis would carry fatal consequences with it.

501. At the same time we must admit that this hypothesis may certainly be false; for which reason it will have to be verified by the most accurate possible experiments.

On the other hand, we do not yet see any argument that proves it absurd, and we hold that those persons are wrong who, making arbitrary additions to it, have tried to use it in favour either of *materialism* or of *panthcism*.

ARTICLE I.

The Hypothesis that all the Elements of Matter are Animate does not favour Materialism.

502. And, in the first place, it is evident that materialism can in no way be legitimately deduced from it, if we merely consider that, if every material element has a feeling joined to it, the extended element can only be the term of this feeling, and that this feeling, on the other hand, requires a simple principle as its essential constituent.

ARTICLE II.

The Hypothesis that all the Elements of Matter are Animate does not favour Pantheism.

503. As for pantheism, it is altogether indifferent whether we admit that the animate substances in the universe are more or fewer, some or all: so long as we admit that they are created and, therefore, altogether distinct from the Creator, pantheism is excluded.

504. In the second place, we must not confound the hypothesis which attributes feeling to the primitive elements of matter with the hypothesis of an *Anima Mundi*, as conceived by the ancients. Even this latter hypothesis, however erroneous, does not necessarily lead to pantheism, so long as we grant that this soul is created. But the hypothesis of the animation of the primitive elements means, moreover, that there are many souls, that souls are as numerous as the separate elements or groups of elements. These souls, therefore, being individually distinct, or, at least, capable of being distinguished and multiplied by separation, could never be confounded with the divine substance, which is most simple and in no way multipliable.

505. In the third place, corporeal feeling is altogether distinct from intelligence; it is blind. God, on the other hand, is intelligible and intelligent in His very essence; for which reason He can in no way be confounded with a sensitive soul.

506. In the fourth place, the sensitive soul is only the sentient principle, and matter is its term, naturally opposed to it. These are two diverse natures. It is, therefore, impossible to reduce all things to a single nature or substance, as the pantheists do.

507. For these reasons it is plain that whoever thinks he can deduce pantheism from the animation of the elements must (1) confound the contingent with the necessary, (2) confound what is multipliable with what is not,

(3) confound sense with intelligence, that is, be a sensist,* and (4) confound the sentient principle with its felt term, the truth being that *pantheism* is nothing more than absolute confusion dignified with the title of a system.

508. In the human soul the synthesis of concepts precedes their distinction, as in creation chaos precedes the distinction of the parts of the universe. Hence, it is no wonder that pantheism appears at the incipient stages of all philosophies. It is not that confusion is natural to the human mind; it is only natural to it from the beginning to think with large concepts, and to perceive real things as a single thing with variations, if we may so express ourselves. But when, with these first poor materials, man undertakes to frame a philosophical system, then, puffed up with presumption at his enterprise, he rushes headlong into error and invents pantheism. Still, as every error has its origin in some truth, it will not be amiss to consider the aberrations of the human spirit, in order, above all things, to find out where there appears unanimity of opinion or an inclination of the whole human race, which may be an index and characteristic of truth. Now, there is no denying that always and everywhere the minds of men have shown a very strong inclination to suppose matter animate, although this concept has been crammed with a thousand errors.

ARTICLE III.

Opinions respecting the Animation of the Elements.

SECTION I.

Indian Philosophers.

509. India, where life in all the kingdoms of nature seems so fertile, indefatigable, exuberant, was naturally the country in which, more than in any other, the imagination induced the belief that all nature was animate.

510. Moreover, this animation was attributed to a uni-

* Virey refused to admit spontaneous generation, being afraid of falling into pantheism. It is an important observation that sensists are one step nearer pantheism than anyone else, just because pantheism is the abolition of all differences, and sensism is the abolition of the difference between sense and intelligence.

versal spirit as its cause. This unity of life, understood in a certain sense, would not be far from the truth: it is the thought of the East. In the Scriptures themselves we read of a "spirit of life," that animates all that lives,*

In fact, if we admit that sensitive life multiplies through the division of living *continua*, everyone will readily understand that all nature may be conceived as united, organized, and thus animated, so to speak, by a single soul.

But as soon as we lose sight of the multiplication of this soul through the division of its term; as soon as we suppose that the soul retains its unity even after the *continua* are divided and are no longer in contact, then we fall into error, because we have failed to recognise the fact of the multiplicability of the soul and of the plurality of souls.

511. To this first error the philosophers of India added a second and far more serious one. They stopped short with the soul of the world (*Anima Mundi*), and took it for God Himself, the Creator of all things. After that, what was there to stop them from drifting into pantheism?

512. It is not difficult to recognise that matter exists only in relation to feeling; and that, in feeling, the soul, that is, the sentient is the active principle, in which and through which even the extended, as felt, exists. This thought very readily paved the way for the *doctrine of emanation.*

As soon as this hypothesis was adopted, it was natural enough to conclude that all beings participated in the substance of the first being from which they were supposed to spring.

513. In the Book of the Laws of Manu, in a description of the origin of the world, we are told: "He who can be conceived by the spirit alone, and who escapes our organs of sense, who is without visible parts, eternal, *the soul of all beings*, whom none can comprehend, displayed His own glory. Having determined in His own thought to make the different creatures *emanate from His substance*,† He first

* Gen. i, 2; vi, 3, 17; Job xii, 10; Ps. ciii, 29; Eccles. iii, 21; Ezek. i, 20, 21; x, 17; xxxvii.

† *Avyâ Kritarûpât*, which they render "from his own form not yet revealed and manifest," which might mean

produced the waters in which He deposited an active seed."*

From this germ deposited in the waters He Himself came forth under visible form, or as the Supreme Soul (*param-âtmà*).

From this Supreme Soul there came forth (1) intelligence, (2) consciousness or the *Ego*, (3) feeling, which resolves itself into the sensitive and active organs, and a common inferior sense; and hence all beings.

"From the Supreme Soul, he (Brahma, that is, the creative energy) drew the inner sense (*manas* †), which exists and does not exist for itself; and from this intelligence he drew consciousness (or that which produces the *Ego*), which internally admonishes and governs, and the great intellectual principle and the five organs of the senses destined to perceive external objects.

"Having once pervaded with the emanations of the Supreme Spirit the smallest particles of the six principles,‡ immensely operative, he [Brahma] formed all beings." ‖

All beings, therefore, as issuing from spiritual principles, feeling, intelligence, consciousness, and the five subtle particles, or elements composing the five senses, must be accompanied with life and feeling.§

either "from the first matter," or "from the eternal possibility existing in the word" [λόγος].

* Bk. I, 7, 8. Nevertheless, even in the Book of Manu, a distinction is made between animate and inanimate beings.

† I interpret the word *manas* as internal sense or feeling, relying on the poem of Ishwara Krishna, a compendium of the Sankhya philosophy, which at the 27th distich thus speaks of *manas*. "The *manas*, or inner sense, participates substantially in the double nature of these two series of senses" (*i.e.*, of the five organs of perception and the five organs of action). "It judges, compares, and is called sense through the affinity which it has to the other senses."

‡ These six principles are the five senses formed by the five subtle particles or elements, together with the triad formed by the internal sense, intelligence and consciousness. See the above-mentioned poem of Ishwara Krishna, dist. xxix.

‖ Manava-Dharma-Shastra, chap. i, 14-16.

§ The material elements cannot subsist by themselves: "As a picture," says Ishwara Krishna, "cannot subsist without a ground, or a shadow without a solid body, so the subtle being or corpuscle devoid of basis cannot subsist without the distinct element." Dist. xli. And further on: "The corpuscle cannot exist without the conditions and modes of being: so, likewise, the manifestation, the development of the conditions and modes of being can never exist without the corpuscle: hence it is said that a double creation (an intellectual and an elementary one) proceeds from the corpuscle and from the conditions."

It is, therefore, no wonder if, a little further on, feeling is attributed to plants. "All these plants spring from a seed or from a cutting. Enveloped in the obscure quality,* manifested under a multitude of forms or causes of their previous actions, these beings, endowed with inner feeling, are subject to pleasure and pain."†

In one word, according to this system, the whole universe is merely the Creator Himself under a particular form.

"And since the six imperceptible molecules partake of the six successive emanations of the Supreme Being,‡ wise men have called His visible form *s'arîram* (receiving the six). The elements penetrated into this visible form with their active faculties, so likewise does the triad (*manas* ‖), the inexhaustible source of beings with corporeal organs. From the more subtle parts of these seven principles §

* The *obscure quality* is explained in Bk. XII, 26, 29, where we are told that the distinctive sign of it is *ignorance*, and it is defined as "a disposition devoid of the distinction between good and evil, incapable of discerning objects, inconceivable and unappreciable by the consciousness and external senses. Hence, in this philosophy the distinction between *brute beings* and *animate beings* is, that the faculty of knowing is bound up with the latter, though in a concealed state. "This corpuscle," says Ishwara Krishna, "formed for the use of the soul, behaves like an actor, who, according to his inclination, puts on at one time the original conditions of the intelligent principles, at another, the conditions derived either from the non-intelligent principles, according to the union of procreative nature with its essential virtuality." Dist. xlii.

† Manava-Dharma-Shastra, ch. i, 49.

‡ The six successive emanations are the triad (internal sense, intelligence, consciousness) and the five elements which go to compose the five organs of the senses.

‖ The triad also is comprehended under the word *manas*, which at other times means merely the internal sense, the principle of the triad, because in the internal sense are included consciousness and intelligence, which emanate from it. See the *Uttara Mimânsâ*, Bk. II, chap. iv.

§ Here seven principles are spoken of instead of six, as before. Now the six principles previously alluded to were *emanata* corresponding to the six emanations; the seventh is the emanator. In Ishwara Krishna's poem we read: "Uncreated is the procreating root. The great principle, or intelligence, and the other procreative or procreated principles are seven." Dist. iii. Among these, therefore, is included the first procreative principle, that which manifests itself in the universe as in its visible form, and which, therefore, is the first and fundamental principle of the world. The six emanations are explained in the same Book of Manu, Bk. I, 74-78, in these words. "At the expiry of this night, Buahorâ, who was asleep, awakes, and waking, causes to emanate the spirit (*manas*, the triad) which, by its essence exists, and does not exist for the external senses (Emanation i). Moved by the desire to create, the *spirit* (the triad) works the creation and gives birth to the æther, which the wise consider as endowed with the quality of sound (Emanation ii). A transformation being wrought by the æther, there springs up the air which is the vehicle of all odours, pure and full of force, whose known property is

manifested under visible form and endowed with great creative energy, this universe was formed. It is the change of the immutable."

514. The life of all the beings and of all the molecules that compose the universe is described in many places, among others in the Isa-Upanishad of the Yajur-Veda, where, according to the translation of G. Pauthier, we read:

"This universe and all that moves in this universe * is full of the energy of the ordering Being.

"To him who recognises that beings are in the universal Soul, what can there be without sense?

"May my soul be absorbed in the MOLECULAR and universal SOUL of space!" †

In this system, therefore, death is only the dissolution of the external form; the feeling never perishes; individual souls merge in the universal soul, when the aggregation of matter dissolves; in the universe there is naught but transformations, and in this the corruptible or perishable universe is distinguished from the incorruptible principle and imperishable ‡ elements, which properly constitute its inner substance.

515. Now, this most ancient explanation of the phenomena of the world shows how the ancients were persuaded that it was impossible in any way to give a reasonable explanation of them by reference to mere brute causes, with which modern materialists have stopped short.

It also shows the rocks of pantheism, of emanationism, and of metempsychosis, on which one might easily make shipwreck, if, in so subtle a question, he did not proceed with the utmost care and caution.

tangibility (Emanation iii). By a metamorphosis of the air, fire is produced, which brightens, dissipates darkness, shines and is declared to have, as its endowment, visibility (Emanation iv). From fire, by a transformation, arises water, which has the quality of taste (Emanation v); from water proceeds earth, which has for its quality, smell (Emanation v). Such is the creation wrought at the beginning."

* Be it observed that it is in order to explain motion that Indian philosophy goes back to the first spiritual principles and gives the universe a soul.

† I, 7, 17.

‡ "The subtle beings (the elements) are permanent; those born of father and mother (organisms) return to naught and are perishable" *Ishwara Krishna*, Dist. xxxix.

But, after all, it is clear that such errors are not necessary consequences of the hypothesis that the corporeal elements have, necessarily joined to them, a feeling whose term they constitute. This feeling would neither always remain one, nor would it be an emanation from God, as if it formed part of His own substance, but would be a creation of His; neither could it be confounded with matter, nor with the intellective principle, which in man stands above feeling.

SECTION II.

Philosophers of Greece, Italy, and other Nations.

516. From the East let us pass over into Greece. The doctrine of a world-soul was admitted by nearly all the philosophical schools. Each conceived it in its own way—Hêrakleitos in one way, Plato in another—but, in the last analysis, they all agreed that the world was animated.

517. Many attributed life to the separate elements. Among these was Empedoklês, of whom Sturz says: "*Empedoclem quodlibet elementum pro animo sive anima habuisse.*" * He even went so far as to deify the elements. Plato also attributed feeling to the elements.†

Of Dêmokritos, Plutarch writes; "He believed that all things share in a kind of soul, even dead bodies, and hence these always manifestly have some portion of heat and feeling, although the greater part of it be evaporated."‡

518. Having received the doctrine of the animation of the world from the Italian philosophers, Virgil expounded it in marvellous verse, Cicero in the most elegant prose.

519. We have already said that one of the errors which marred the theory of the animation of the world was, that the unity of the world-soul was constantly maintained, while another was, that the failure to draw a line between sense and intellect led philosophers to attribute not only a

* *Empedocles*, §§ ix, xv; Aristotle, *De Anima*, I, 26; 404 b 10.

† Πρῶτον μὲν οὖν ὑπάρχειν αἴσθησιν δὲ τοῖς λεγομένοις ἀεί. *Tim.*

‡ *De Placit. Philos.*, Bk. IV.

sensitive, but even an intelligent, universal soul to the world.

These errors, finding their way into the Church, became so many heresies.*

But spontaneous generation was not rejected by the Fathers of the Church, who, in order to explain it, sometimes attributed a primitive animation to certain corporeal molecules. †

520. The Italian philosophers of the sixteenth century also brought forward the hypothesis of universal animation; but they not only failed to distinguish the sensitive from the intellective soul, but also fell into the error of positing a single world-soul, and Telesio wrote a small treatise with this title, *Quod Animal universum ab unica Animæ Substantiâ gubernetur.*

521. Francis Xavier Feller writes as follows: "Any one who takes pleasure in mingling some systematic idea with the truths that are independent of all system, may believe that God, in pouring out upon the earth the universal, seminal matter for the conservation and reproduction of species, may at the same time have coupled with it this neutral substance, whose nature is unknown and of whose existence merely we have some idea—a substance capable of animating organic bodies, and exercising its activity as soon as it finds itself in a compound of organs in which it can display its forces, but otherwise remaining inactive and in a kind of inertia. This idea, which renders the state of nature in the highest degree simple, and which admits the most general and complete explanations, agrees almost exactly with what has been

* Hence St. Jerome declares it to be heretical to hold that there is a rational soul joined to all things. Commenting upon the passage of St. Matthew: "Then he arose and commanded the winds and the sea" (viii, 5), he writes: "*Ex hoc loco intelligimus, quod omnes creaturæ sentiunt Creatorem. Quas enim increpavit, et quibus imperavit, sentiunt imperantem; non errore hæreticorum, qui omnia putant animantia, sed majestate Creatoris, quæ apud nos insensibilia illi sensibilia sunt.*" Comment. *ad loc. cit.*

† St. Augustine held this opinion. "*Omnium quippe rerum,*" he writes, "*quæ corporaliter, visibiliterque nascuntur, occulta quædam semina in istis corporis mundi hujus elementis latent.*" De Trinit., III, viij. Cf. St. Thomas, *Sum. Theol.*, Pt. 1, q. cxv, art. ii.

written on the same subject by Cardinal Tolomei, Father Kumeth, Himheim, Mr. Le Cat, and others. Bossuet* and Father Kirker† follow the same opinion."

But to bring in the sort of neutral substance indicated in this passage, as a minister of animation, is to add hypothesis to hypothesis in a purely gratuitous way. It is sufficient to suppose that there is feeling coupled with the elements, in order to give at once a complete explanation of all the facts of spontaneous generation, of all the various manifestations of life, of motion, and of organizing conation in all the corners of the earth.

522. After Van Helmont proposed his *Archæus*, there appeared certain philosophers or physicians who assumed the title of *New Pythagoreans*. These spoke of a *common soul*, which they distinguished from the intellective soul. One of their principal errors was, that they believed in the *transmigration* of this sensitive soul. In regard to this we may observe that the transmigration of a merely sensitive soul is not only an erroneous, but even an absurd notion, because such a soul cannot migrate to a second body without detaching itself from the first, and this it cannot do without perishing or losing its identity.‡

523. It may be said, therefore, that the hypothesis of the animation of matter was never presented clean, free from errors and arbitrary adjuncts; but that, if we choose to enumerate all those who have propounded it in a thousand ways, without taking account of the annexed errors, we shall find it common to all the philosophical schools of every age.

In truth it is held,

1.° By the materialists, who attribute to matter a force which is the cause of life and feeling. These err only in not distinguishing this force from matter itself. ‖

* *Discours sur l'Histoire universelle*, Pt. II, n. 1.

† *Mund. subt.*, Pt. II, p. 337. "This hypothesis is strangely disfigured by Mr. Carra in his *Nuovi Principî di Fisica*, and extended to the origin of nature and of the human soul." We may also add Sennert, *Medicina Practica*, Bk. VI.

‡ Cf. Mich. Aloy. Sinapius, *Theoremata et Quæstiones*, chap. v, entitled, *De Spirituum Effluviis et Animæ Communis Transmigratione juxta modernos Pythagoricos*.

‖ Geo. Freitag, Professor in Groningen, in a work entitled, *Novæ Sectæ Sennerto-Paracelsicæ Detectio et solida Refutatio* (Amsterdam, 1637), under-

2.° By all those who have admitted or admit a world-soul. These err only in supposing this soul to be intelligent and independent, and in excluding a plurality of individuals.

3.° By the pantheists and emanationists. These err only in maintaining that souls are parts of the Divine substance, or the Divine substance itself fashioned in various forms.

4.° By the naturalists, who suppose a neutral substance, a biotic fluid, an imponderable substance, diffused through all, pervading all, animating all. These err in positing in nature a substance too many, a substance whose existence, and even whose virtuality, is not proved.

5.° By the Pythagoreans of all times, or rather by all the most ancient schools which admitted the existence of a common soul, individuating itself or transmigrating. These erred in adding to the errors already mentioned that of transmigration.

6.° By all those classes of idealists who make matter a modification of spirit. They have only erred in confounding term (matter) with principle (spirit), and the sensible with the intelligible.

Let us strip all these systems of their errors, and there remains at the bottom of them an opinion held by all—the need of supposing nature to be animate.

SECTION III.

German and English Philosophers.

524. In Germany, the native country of transcendental idealism, the hypothesis of life annexed to the elements of matter was cultivated and, at the same time, depraved.

Everyone knows how much was given to these philosophers to think about by Schelling's *Erster Entwurf eines Systems der Naturphilosophie (First Sketch of a System of Nature-Philosophy)*. But the impulse came from Kant,

took to prove, in opposition to Sennert, the activity of the elements and the derivation of the form and soul of the brutes from matter.

who was under heavy obligations to Leibniz's *Monadologie*. Leibniz himself had been in some measure forestalled by the Englishman Glisson († 1776), just as the latter had been forestalled by the Italians, Telesio, Bruno, Campanella, Cardano († 1576), &c. Let us say a few words respecting Glisson's way of viewing the matter.

525. Glisson begins by affirming that the concept of substance cannot be attributed to anything that has not the three faculties, *perceptive*, *appetitive*, and *motive*,* and undertakes to prove that even material substance is endowed with these, taking it for granted that bodies are substance.

In the XV. Chapter he is trying to distinguish *natural perception*, which he attributes to material substances, from *sensation*, and it is here that he shows that he has not in the smallest degree seized the character of sensation, or the manner in which it is distinguished from *intellection*, with which he confounds it, while at the same time the truth shows him, if not itself, at least some hem of its garment. For example, in comparing his *natural perception* with *intellectual perception*, he lays down this difference: "The former is a necessary and simple faculty tending directly to action; the latter is, in a sense, doubled or judged, and terminates in action through the medium of free will. And I hold that intellectual perception presupposes natural perception and contemplates it, as it were, reflexively, and, therefore, perceives the perception of it." (He ought to have said "perceives that perception.") Now this is a capital distinction, observed by us to exist between *sensitive perception* and *intellective perception*. The former is simple and without judgment; the latter is double and accompanied with judgment. The authority of the English physician goes to confirm our theory; but the excellent

* *Dico igitur, omnes substantias proprie dictas, hoc est, per se, sive suo marte subsistentes, esse* NATURA QUADAM VITALI, *nempe tribus istis primis facultatibus,* PERCEPTIVA APPETITIVA *et* MOTIVA *præditas.* (De Natura Substantiæ energetica, seu de Vita Naturæ ejusque tribus primis facultatibus perceptiva, appetitiva et motiva naturalibus, &c. London, 1672, chap. xvi.) Glisson sees that we cannot conceive a body without attributing life to it; but he does not see that body is one thing, life, another; that the body is merely the term of a sentient principle—a term that is real and endowed with an activity of its own, opposed to the vital activity to which it is united.

writer did not see that, prior to *intellective perception*, there is *intuition*, which does not involve any judgment and is objective, whereas *sensation* and *sensitive perception* are subjective and extra-subjective.

526. Nevertheless, Glisson was led to a dim insight even into the *objectivity* of intellective perception, when he reflected that its objectivity is a necessary condition of the existence of will and liberty. Hence he wrote: "The second difference (between the intellective perception—of an angel, let us say—and the natural one)" consists in this, that the intellect of the angel "can represent the object to its will *sub aliquali indifferentia objectiva*, so that his will exercises its free choice with regard to it, choosing it or not choosing it. Indeed, if the eligible object is not presented to the will under an indifferent form of some kind, liberty cannot be exercised with regard to it, but the choice remains predetermined and necessitated by the rigid *dictate* of the intellect." Here again Glisson is with us, in that he attributes to the object of the intellect, as such, an indifference that may be taken from it by the will, which may render it good or evil to itself. This function of the will is what we call the *practical reason*, which freely makes the one or the other of two objects the better for man, and so renders it the stronger.

527. But when he undertakes to distinguish *natural perception* (which, in fact, corresponds to what we have called the *fundamental feeling*) from *sense* (which corresponds to our *sensation*), then he shows that he has not attained clear and distinct ideas, inasmuch as he is ignorant of the distinctions between extra-subjective phenomena and subjective facts, as well as of the other distinctions mentioned above.

Glisson, then, attributes to his *natural*, or *animal*, *perception*, as he also calls it, the following distinctive characteristics:—

1.° It is homogeneous and inorganic, whereas sensitive perception is organic. But this is purely an extra-subjective difference, implying no internal difference between the two perceptions.

2.° It is simple, whereas sensitive perception is compound and, as it were, duplicate, being a perception of perception. Here he did not observe that sense never turns back upon itself, but always remains perfectly simple, except that *perception*, in so far as it is distinguished from *sensation*, contains an extra-subjective element, and therefore may be said to be composed of two elements, but never of a perception having another as its object. It is always a single perception, in which there is no object, but merely a term. Now, from not having known the essential simplicity of sensation, he was led afterwards to give to his natural perception a kind of duplicity, and this made him wander into inextricable subtleties of reasoning, which were altogether useless.

3.° Hence he even attributes judgment to sense, "*Sensus includit quasi implicitum quoddam judicium de re percepta.*" In this way he again confounds sense with *intellective perception*, whereas in sense the thing perceived is not an object (and it is only to an object that a judgment can refer), but an element which cannot be conceived otherwise than as matter or term with relation to a sensitive principle, so that the activity of the sentient does not exist without it, and, being individual, cannot be multiplied. Hence it cannot even judge the element which it requires in order to exist.

4.° Continuing in the same false direction, Glisson attributes to sense the power of erring, whereas, in truth, error belongs only to judgment and, therefore, to the functions of reason.

5.° He attributes to it the power of contemplating an object, "*Objectum perceptum, ut quid extra se, contemplatur.*" And he is so far from conceiving sensation and sensitive perception in their purity and simplicity, and without the arbitrary addition of intellectual elements, that he speaks of his *natural perception* in language that is applicable only to *intellective perception*, giving it a *self*, and the power to represent itself, its causes, its effects, &c.*

* *Illius enim* (*perceptionis naturalis*) OBJECTUM *est entitas propria, quæ* REPRÆSENTAT SE, SUASQUE CAUSAS ET EFFECTUS, *itemque omnes* INFLUENTIAS *aliarum rerum, confœderationes, cooperationes, consensus et dissensus.* Op. cit. chap. iv.

528. Nor is this any wonder; for I will say openly and without regard that I have never found a single philosopher who has succeeded in framing to himself a concept of *simple sensation*, without adding to it either something intellective or something material.*

ARTICLE IV.

Is the Hypothesis of Animation opposed to Common Sense?

529. There are certain questions in regard to which common sense says nothing, because they do not present themselves to the minds of the majority of men. Among these is the question regarding the animation of the primitive elements, which never goes outside of the philosophical schools.

530. And, indeed, if common sense divides bodies into animate and inanimate, it does not thereby pronounce any judgment regarding the question we are dealing with. It merely speaks of the life apparent to the external senses, without in any way proposing to itself the other question: Can there be, united to certain bodies having no animal organization, a latent life, a kind of sensitive principle?

531. Thus, in any case, the ordinary distinction between animate and inanimate bodies remains firm, and we must not alter the ordinary sense of these terms, except to give them a wider and truer signification within the bounds of the school. Let us, therefore, define an inanimate body, as "a body that for want of proper organism, gives no signs of life," or "an inorganic body, which, as such, is inanimate," and let us define an animate body as "a body that gives signs of life," or "an organic body which, as such, is animate,"† and the accord between the philo-

* Among the modern Italians who have attributed the property of life to the elements and to the molecules of bodies, see (besides Forni) Antonio Giuseppe Pari, *Ricerche analitico-razionali sopra la Fisica, l'Analisi, e la Vita della molecola chimica di prim' ordine*, &c. Milan, 1834.

† According to our hypothesis, the life of the organism would be the life of excitation, the life of the simple element would be solely the life of continuity. Common sense has never examined or known the question whether this latter life exists or not. More light will be thrown upon the whole matter by what we shall have to say further on.

sophical opinion of which we have been speaking and common sense is complete.

ARTICLE V.

Does the Hypothesis of the Animation of the Elements harmonize with the Progress of the Natural Sciences?

532. But what say the observers of Nature?

It is a fact confirmed by the whole history of the natural sciences that the more men observe and experiment, the more the boundaries of the domain of life widen.

The sensitivity ascribed by Haller to certain parts of the body has been extended by physiologists successively to others and others.

The discovery of polyps, infusoria, spontaneous movements apparently performed by blood corpuscles, &c., and innumerable other discoveries, make us certain that there is life in an infinite multitude of bodies which formerly seemed, and were held to be, inanimate.

Ehrenberg thought he recognised that certain rocks, especially tripoli, are composed of the shells of animals.

Mauld believed he had discovered that the tartar of the teeth was a sort of cluster of small animals.

Messrs. Payen and Merbel hold that plants are masses composed of innumerable microscopic animals. The former of these gentlemen, in presenting a work on vegetable physiology to the Academy of Sciences in Paris in February, 1844, thus expressed himself: "A law without any exception seems to me to prevail in all the facts observed by me—a law inducing us to regard vegetable life in a new light. If I am not deceived, all that vision, natural or assisted, permits us to discern in the vegetable tissues, under the forms of cells and vessels, represents nothing more than protecting envelopes, reservoirs, conduits, in which animate bodies, which produce these through secretion, dwell, place and transport their aliments, deposit and isolate the secretions."

ARTICLE VI.

Non-Apparent Life and Latent Life.

533. The hypothesis, therefore, of the animation of the first elements of bodies coincides with that universally admitted by physiologists at the present day, viz., that there is a latent life which does not produce external phenomena of excitation, so long as the conditions necessary for their exercise are wanting.

But why, we may here ask, are certain phenomena considered as indicative of life, and others not?

The sole reason is that we derive the criterion whereby we make this distinction solely from our own experience. What we observe in ourselves is the sole rule whereby we judge of other natural beings. We observe, for example, what sounds we emit when a sharp pain seizes us, what others, when we feel a keen pleasure; hence, these kinds of sounds and others analogous to them are the signs whereby we conclude that other beings, which emit similar sounds under similar circumstances, feel pain or pleasure. We observe our own organization, we see how our own flesh is put together, how our own sensitivity is united to nervous filaments, how the different parts of the body contract on occasions of feeling, what external phenomena accompany our feeling and the cessation of it. Hence we conclude that in those beings in which the same or similar things occur, there must also be a feeling similar to ours. But this always remains a relative measure and furnishes no certain proof that life may not exist under other forms—a life certainly different from ours, but still a life and a feeling.

ARTICLE VII.

Three Forms or Grades of Sensitive Life, (1) Life of Continuity, (2) Life of Excitation, (3) Life of Self-renewing Excitation.

534. In order that we may be able to view the above hypothesis from all sides, we must distinguish three modes of feeling, viz.:

1.° A feeling having for its term merely the extended, and this alone is what we attribute to the isolated elements of bodies.

2.° A feeling of excitation, likewise having for its term the extended, but an extended no longer immobile like the elementary one, but having internal movements. This mode of feeling requires a plurality of contiguous elements and motion among them: it, therefore, requires a certain composition—if not organization, at least aggregation.

3.° A feeling not merely of excitation, but a feeling in which the excitation preserves itself, reproducing itself with certain variations according to the same theme. This requires a real organism in which the internal movement can perpetuate itself.

The three kinds of life, therefore, that must be accurately distinguished, are,

1.° That of the single elements in a state of isolation;

2.° That of the elements united and aggregated, but not organized;

3.° That which, besides, presents particular phenomena of its own and which requires a complete organism.

Let us consider each of these separately.

SECTION I.

First Kind of Life, not Apparent.—Feeling of Continuity.

535. If we imagine a single element of matter, extended and perfectly hard, as we suppose the first elements to be, then, although such element were able to come within reach of our senses (which it certainly could not, on account of its minuteness), it would exhibit to us no sign of life, since it could not give to itself, nor receive into it, any movement.

At the same time, its sentient principle would be simple; the term of this principle would be the diminutive space determined by that element: in this felt term there would be homogeneity and uniformity, supposing the matter of the element in question to be uniformly dense

throughout, and difference of intensity, supposing the density to vary in the different strata or points of the element.*

In this little life we should find in all its completeness the characteristic of continuity.†

* This difference of density in a perfectly hard *continuum* is barely conceivable. We shall set it altogether aside, as something not proved and something improbable. We will merely observe that, even if there were a difference of density in the element, there could not result from it any extra-subjective vital phenomenon, unless it were, perhaps, some play of attraction.

If, however, making another hypothesis, we suppose that in every primitive element there is a kind of centre corresponding to Boscovich's simple points, from which there emanates *attraction* or *retention*, and that this manifests its effect in a given ratio—say, in the inverse ratio of the squares of the distances—it is true that the element would be harder and denser in proportion as the matter composing it was nearer the centre; nevertheless, it remains also true that if these elements are supposed of a given minimum size, they will in every part be so dense and so hard as to be indivisible by any external force, and, therefore, real atoms (physically indivisible). It is easy to understand the necessity of this effect, if we consider that, at the smallest distances attraction increases with a progression that surpasses all imagination, and in comparison with which mechanical forces are almost infinitesimal, while forces can be externally applied to the atom only to the most limited extent, on account of its smallness and lightness. In like manner, the physical and chemical forces are almost nothing, that is, if we suppose them all to operate (as we believe they do) according to the same laws that govern universal attraction, or to present the appearance of so operating. Inasmuch as these forces have to be applied to the atoms from without, the body applied to the atom is more distant from the centre of attraction of the atom than the matter forming the atom, and hence this body must exert a less force upon that matter than the centre of the atom, supposed to be the centre of attraction. Moreover, if we suppose attraction to act at a distance (a notion irreconcilable with our mode of perception), it can exercise on the atom only that very small force sufficient to attract it; so that, although the whole atom, being as light as it is small, may be attracted by such forces, it can never be rent asunder by them.

Through the condensation or attracting centre, supposed to exist in the atom, it seems possible to explain why atoms which are in contact with each other (a possible supposition) do not unite so as to become perfectly hard, but may still be sundered.

Indeed, if there were not in the interior of the atom various degrees of condensation of matter, it would not be easy, without denying the contact of atoms, as some have done, or having recourse to a repulsive force, which would seem as if it must be derivative, to explain how atoms, although in contact, still remain distinct and separable. If, however, we suppose condensation of matter to increase toward the centre of the atom, we readily understand how the internal matter cannot be further rarefied, and this for the simple reason that near the surface, at which the atoms touch each other, the matter, though continuous and impenetrable, is most rare, and, therefore, cannot condense there, being always held with greater force by the dense matter nearest to the centres of the two atoms which are in contact.

It remains for the mathematician to subject these postulates to calculation, and to discover how small the primitive particles must be so as to be perfectly hard, that is, indivisible and perfectly distinct from each other, even admitting them to be in real contact.

† Glisson, in the work already quoted from, *De Vitâ Naturæ*, recognises that the coherence of the sentient, or, as he calls them, percipient, particles, results from their continuity. He says: "*Particulæ utilitatem quâ ex sua communione inter se fruuntur percipientes, amant seu appetunt istam suam communionem,*

SECTION II.

Second Kind of Life, not Apparent.--Feeling of Simple Excitation.

536. If now to the simple animate element we join other elements likewise animate, we may readily conceive new phenomena.

Let us suppose these elements to be of different forms.

United together by their own attraction or retention, they will form various polyhedrons, according to the forms of the combining elements. If we suppose the forms of the elements to be regular, there will result regular polyhedrons.

But these regular polyhedrons will differ from each other, not only in form, but also in density, and hence in specific gravity. The reason of this will be clear, if we consider that on the variety of form among the combining elements these two accidents depend:

(1.) Whether the surfaces in contact shall be greater or smaller, and, hence, whether the union of these elements shall be more or less firm.

(2.) Whether there shall remain in the interior of the crystals larger or smaller intervals, on which of course would depend the greater or less specific gravity of these primitive crystals.

537. Let the combining elements be only two. The bination even of primitive elements must give us molecules having properties different from those of the primitive elements.

Still more different, of course, will be the properties resulting from the ternation, quaternation, &c., of these elements.

538. If we suppose that these first elements, even when

et consequenter eandem conservare conantur, hoc est, conantur inter se cohærere. Ita ut ipsa cohærentia interna nihil aliud sit, nisi motus continuus seu motus a continuitate resultans, quo natura eandem conservare conatur. Quapropter, mediantibus perceptione, et appetitu naturalibus. cohærentia IN CONTINUITATE *primo fundatur.*" Chap. xxxiv, n. 22. It must be noted that, according to us, it is sufficient if the particles are continuous in some point of contact, and therefore we need not here enter into the question of the void [κενόν] and the full [πλῆρες].

they are in contact, do not unite with a force equal to that which renders the matter perfectly hard within each element, we shall at once have new vital accidents. In these molecules the continuous term of feeling, to which there corresponds a single sentient principle, is more extended than it is in the primitive elements. It is true that, if the particle were composed of only two or three elements, perpetual* motion could never begin from within it, and hence vital movements would never take place. But, if the two or three elements, without separating, are moved by an external impulse, in such a way that their adhering faces slightly rub, then the uniform feeling diffused through said elements must necessarily receive an excitation, and, hence, it is not absurd to suppose that there arises in it a sensation, although this be evidenced by no extra-subjective manifestation.

Moreover, if we suppose that the two elements, through the violence exerted upon them, no longer have their centres of gravity in the greatest possible proximity, it is not absurd to imagine that they are impelled to restore the equilibrium of forces by the activity of the feeling with which they are invested.

539. For the feeling diffused through the two elements is single, by reason of their continuity, and, as it resists separation, so it tends to unite itself, and hence to hold the elements united and inosculated in the greatest possible number of points, through that momentum of the organizing function which we call *retention*, and of which we shall speak further on.

540. Here then, besides the characteristic of *continuity*, we should have also that of *excitation ;* but this would be momentary and accidental, having no system of stimuli succeeding each other and keeping in continuous, regular,

* I say *perpetual*, because if the two or three elements were placed in contact, in such a way that their centres of gravity were not as near each other as possible, they would by mutual attraction, approach each other; but the motion would cease as soon as they had found the position required by their mutual gravitation. We suppose that this attraction or gravitation is caused, as we shall say, by the activity of the sentient principle.

and harmonious motion the elements composing the little group supposed.

SECTION III.

Third Kind of Life, Apparent.—Feeling of Perpetual Excitation.

541. In the life of two or three or, at least, of a few elements united in a single molecule, we have (1) continuity, (2) possibility of excitation, which are two characteristics of life. But, as the excitation in such a case would depend upon the external force, causing the elements, without separating, to slide upon and rub against each other, it would be momentary and would excite only a transient sensation, which the spontaneous activity of the sensitive principle would not be able to continue.

It is impossible, therefore, to obtain the external phenomena of animal life, unless the living elements unite in considerable number, a number sufficient to form a machine more or less complicated—a machine so cunning in its structure that, through the reciprocal action of organs, there are produced the stimuli which shall perpetuate the motion and, hence, the excitation of the feeling, so that the feeling, harmonically excited, shall both preserve the continuity of the parts and the unity of the organism, and assist with its spontaneity in maintaining the harmonized movement, and that this, in its turn, shall excite the feeling and maintain it in its own proper excitation.

ARTICLE VIII.

Difference of Organization is the Cause of Variety of Life.

542. It is plain, from these considerations, that *organization*, which itself is produced by feeling, gives occasion to the varieties of natural beings and the diverse kinds of phenomena that present themselves to our observation. Hence,

1.° Compounds made up of few elements cannot manifest any forces other than mechanical, physical, and chemical, and it does not seem unlikely that the true

cause of these is the feeling which is inherent in the first elements, but which has not the power to manifest itself otherwise for want of a proper organization.

2.° In compounds made up of a larger number of elements we ought to begin to observe a certain regularity of organization, such as we find in the minerals, and the similar aggregation which occurs chiefly in the metals.

3.° If the composition is more complicated, it ought to produce the organization of plants, which are altogether destitute of organs similar to those by which man expresses pleasure, pain, his instincts, &c. But in this organization there is a system of self-generating stimuli. All that is wanting is the external signs of feeling felt and signified by man. We cannot, therefore, know what kind of unity, concentration, and excitation there is in the feeling which may exist in vegetables.

4.° With a more cunning organization, we find *manifested*, besides these characteristics, the phenomenon of *irritability* or *contradistension*, which, though not capable of manifesting to us, with complete clearness, the existence of feeling, approaches feeling, through the similarity which the movements of such irritable and contradistensive bodies have to the spontaneous movements arising from feeling, and through their texture which resembles that of felt organs.

5.° Finally, with an oganization still more complicated and perfect than the preceding, there are manifested the extra-subjective phenomena, commonly called animal, which are specially those that bear evidence to the existence of feeling, to the continuance of the term of feeling, to the unity of the action of feeling itself—a unity capable of dominating all movements, which, though not deriving their principle from it, owe to it their continuance and direction. These movements, again, produce the stimuli which re-excite the feeling when its excitation flags, and restore it to its previous state.*

* Chemistry, which has still so much to do, supplies us with precious facts in confirmation of these conjectures. Minerals frequently result from the

ARTICLE IX.

Sensitive and Non-sensitive Parts of the Animal.

543. The system here set forth enables us, further, to understand why it is not necessary that all the parts of an animal body should be felt by the same individual, that is, should form parts of the same fundamental feeling, since some parts may have a feeling of their own, and this feeling nevertheless be necessary to constitute the extra-subjective machine in which the stimuli provocative of feeling must be continually reproduced or reactuated, which stimuli need not be the term of the fundamental feeling of the animal.

544. In like manner, we understand how certain insensible parts of the body may become sensible, or *vice versa*, it being sufficient, in the one case, that their special feeling should communicate itself to, and become continuous with, the total feeling; in the other, that it should separate itself from the total feeling, co-operating only to form the organic unity.

545. We likewise understand why certain organs or parts of the body seem to enjoy a life of their own, and are subject to death before the others.*

combination of only two elements; plants have never fewer than three; but there is no animal body in which there do not occur at least four chemical elements, oxygen, hydrogen, carbon, and azote. This last is not necessary to vegetables. It is, therefore, certain that the phenomena of feeling never present themselves to our outward observation except as connected with a complicated and manifold organization.

* The ancients observed this partial and special life of some parts of the human body. Aretaios writes thus of the matrix: "In the very middle of the iliac region of woman is placed the uterus, a female intestine, not inaptly said to resemble an animal. It moves from side to side toward the thighs; it acts in concert with the xiphoid cartilage above it; it moves sidewise, sometimes to the right, sometimes to the left, sometimes toward the liver, sometimes toward the intestines. Thus, in the human species, it may be said that the uterus is like one animal living inside another." (*On the Causes and Signs of Acute Maladies*, Bk. II, chap. xi.) Galen, in his work on the *Formation of the Fœtus*, mentions the opinion of certain physicians who considered every muscle as a separate animal: "And indeed, some of them have said that every muscle is felt by our will, like a kind of animal, and that the will draws and rolls the tongue till it assumes the proper form for the production of any required sound."

ARTICLE X.

Important Questions that remain to be Answered.

546. But here there certainly spring up difficult questions, full of those enigmas, in which all natural researches are involved, since all nature is only one great enigma resulting from enigmas without number.

In what way does the special feeling of an element, of a molecule, of a rudiment, of an organ, become continuous and one with the fundamental feelings of other elements, molecules, rudiments, organs? Is the continuity of the parts sufficient, as we have thus far supposed? Is this continuity sufficient to make the smaller feeling lose its individuality? Does it individualize itself through the maximum excitement produced in some point of the continuous, in which, consequently, the vital activity, that is, the intensity of the feeling which is the centre of all harmonious movements, accumulates? And, if these centres are various, are there then several sentient individuals in the same continuous? And can the diverse movements continued from these centres, each for itself, be so harmonized as not to break up the continuous into several *continua?* And is not this the case with polyps, with gemmiparous and fissiparous animals, and with entozoa? If so, has each of the sentient principles the whole of the continuous as its felt term?

ARTICLE XI.

Direct Proofs of the Animation of the Primitive Elements, which raise the Hypothesis almost to a Certainty.

547. Admitting spontaneous generation, we must also admit that the elements, or, at least, the molecules of which the new animalcules are composed, were previously animate. Unless we do this, materialism is unavoidable, because we should then have to say that life and feeling are produced from brute matter, which is absurd. For

the term of feeling is opposed to its principle; and, if the extended term produced its principle, which is something essentially simple, this would be an effect dissimilar and opposed to its cause, and this runs counter to the ontological principle that every cause must produce an effect like itself.

548. In the second place, if the elements had no feeling, they would not have an existence of their own, but merely an extra-subjective existence relative to another subject. Hence, they would be absurd and impossible beings, mere illusions. And indeed, "possibility is thinkability; that which cannot be conceived cannot be" *(by the principle of cognition)*.* But we cannot conceive a being which is a mere relation to another, since, if a being has a relation, there must be in it something that constitutes the *terminus a quo* of the relation. But, if the element did not feel, it would be nothing in itself, it could not be the subject or *terminus a quo* of the relation. Such an element, therefore, cannot be thought. It would, therefore, be a deceptive appearance and nothing more.

549. The fact that in the microscopic world generation takes place with so much more facility than in the world of larger bodies, as well as the fact that spontaneous generation takes place only in the case of the most minute animals; is a pretty strong proof that life is bound up with the primitive elements. For, granted that this is so, these two facts are at once explained. If life is bound up with the primitive elements, it is at once clear how they, being not yet organized, are free to unite together in the manner which is most suitable to their instinct (the formative law of which we shall explain in the second part), thus very easily organizing animal individuals. On the other hand, bodies already compounded cannot organize themselves in the form of animals, because the organizing elements cannot move in them with freedom.

550. This is so true that all generation, even in the case of the larger animals, takes place by means of

* *New Essay*, vol. ii, nos. 551-566.

moisture and *heat.* The fluids, therefore, are the first living things, the organizers, because in them the elements and the molecules are mobile and can organize themselves variously according to circumstances, bringing into existence composite animals.

551. A fifth proof of the animation of the elements is derived from internal observation, which says that sensation extends in a continuous.* This is proved also by reasoning; because if it were not so, we could have no idea of the continuous. † But we do have an idea of the continuous. Hence, the extended felt must necessarily be continuous. Now, wherever there is the felt, there also is the sentient; because sentient and felt are two indivisible things. ‡ The sentient, therefore, is in all the assignable parts of a felt body. Therefore, it adheres to the first elements, that is, to the most minute *continua* of matter.

552. Other proofs in confirmation of the animation of the elements will be set forth from time to time, as occasion offers. To anyone who has understood them, the hypothesis will cease to be an hypothesis, and will, we believe, enter into the number of demonstrated truths.

553. We do not intend, however, to solve these most mysterious questions; and it seems to us that the philosopher has done enough when he has simply determined what hypotheses respecting such recondite questions do not involve logical contradiction, or opposition to other metaphysical truths, or to the experimental data supplied every day more and more copiously by the physical sciences.

* *New Essay,* vol. ii, nos. 846-870.
† *Anthropology,* Bk. II, sec. i, chap. vii, art. i; nos. 94-103.
‡ *Ibid,* chap. ix; nos. 230-246.

CHAPTER XVI.

ON UNLIMITED SPACE AS THE TERM OF SENSITIVE SOULS.

554. In the *Anthropology* we have shown that we cannot conceive or feel a limited portion of space, unless we suppose that we also feel solid, unlimited space. By this and various other arguments we think we have shown that all the phenomena presented by corporeal feeling lead us to suppose that every sensitive soul has, as its term given by nature, solid unlimited space, or, if the expression is preferred, unmeasured space, in which then there arise the corporeal felt terms, which expand in a space limited and measured by determinate boundaries.

555. If we supplement this theory by that of the animation of the elements, we arrive at the conclusion that the corporeal elements, described by us, approximate, in some measure, to Leibniz's monads, which he regarded as each representing the universe. Our elements, or rather, our sentient principles, would not, to tell the truth, be representative of the universe in the way in which Leibniz's monads were supposed to be, because that great thinker maintains that these represent the universe with all it contains of corporeal and spiritual beings, whereas our sensitive principles would embrace only solid, unlimited, unmeasured space, in which corporeal beings subsist.

556. Having now reached the result stated above (and we did not reach it lightly, but by long meditation and the force of logical necessity), we are now obliged to ask ourselves the question: Could there be a sentient principle which should feel nothing but solid, unlimited space, and, if there were such, would it be an individual? The question is plainly one of mere possibility; still it may be con-

sidered with profit, because it is always useful to clear up concepts akin to those which philosophy immediately requires. We say, therefore, that the concept of such a principle involves no absurdity, and, if there were such a principle, it would certainly be an individual on account of the simplicity and reality attaching to the [illegible] principle and such a principle.

557. But hence there springs a consequence of some moment, which is, that there could be only one such individual. If two principles had an identical term, such as unlimited space, they could not, in any way, have a distinct reality, and so, would not be two but one, inasmuch as reality is the principle of individuation. Now, that such principles could not have a distinct reality is proved in this way. Principles, as such, have no activity or reality but what they receive from their terms. If, with our imagination, we add any other reality to them, they will no longer be mere principles, according to the hypothesis. If, therefore, the term is one and identical, the reality and activity of the correlated principle must likewise be one and identical. But solid, unlimited space is one and identical; therefore, the correlated term of this principle must be the same. This argument is irrefragable; but the fact is somewhat difficult to conceive, owing to the readiness with which the human mind inclines to consider the principle as having some appendage, and the difficulty it has in thinking that a mere principle can be a being or a substance, without something else besides the sentient or percipient act; and such an appendage would become a difference sufficient to distinguish the principles so imagined from each other. The thinker, therefore, must use every effort to clear the concept of principle from every arbitrary adjunct, and then he will feel all the force of our argument.*

* This theory accords with the other; that a continuous, however great or small (apart from excitation), can have only one sentient principle, a theory from which we have deduced the multiplication and concentration of sensitive souls. These two doctrines mutually prove each other. The proofs of the one thus become proofs of the other.

558. If we admit this, what relation will such a principle bear to the sensitive souls of bodies? These will arise and individuate themselves within this principle by means of new terms, namely corporeal ones. This primitive principle might, in a certain improper sense, receive the name of *common soul*, or, more properly, common principle of sensitive souls (of corporeal feeling).

559. The individuality of these souls would remain intact; but they would have a common act and special acts. These special acts would constitute their special reality and substance, and hence their substantial difference, and this special reality would be their principle of individuation. This would agree with the doctrine of St. Thomas, that matter is the principle of the individuation of souls, although this holds good only for purely sensitive souls. In this there is no contradiction. But we must speak at greater length of the individuality which constitutes them.

CHAPTER XVII.

ON INDIVIDUALITY.

ARTICLE I.

Concept and Nature of Individuality.

560. *Individual*, considered with reference to its etymology, means indivisible. According to this signification, every essence, every species, and every genus may be called an individual, being in the highest degree indivisible.* But the word *individual* is more usually employed to mean the *indivisibility* of real beings, many of which frequently correspond to a single essence or a single species. And at present we use the term in this signification.

561. *Real being*, in so far as it is indivisible, is one. But, as there are various modes of unity, so there are various kinds of indivisibility, and, consequently, of individuals. Even an aggregate of several beings, in so far as the mind conceives it as a single complex being, may be called an individual; but this is a *mental individuality*; it is the individuality of the concept applied to reality. We are not here speaking of this mental, artificial reality, which has its foundation in the unity of the concept, whereby the manifold is thought *per modum unius*, as the Schoolmen said: we are speaking of real unity, which has its foundation in reality itself.

562. Real beings may be many; but each of them must be one. And, indeed, that a real being should be

* St. Thomas distinguishes four kinds of individuals: (1) the singular, (2) the most special species, (3) the most general genus, (4) the immediate proposition. In *Metaph.* II, sec. iv.

several beings is a contradiction; because if it is several, it is not one. It is, therefore, essential to a real being that it should be one; because the two terms of the proposition are identical. If the being which was one becomes two, there is no longer one being, but two, each of which is one. Therefore, every real being, in so far as it is a being, is one, and, in so far as it is one, it is indivisible.

563. The real being, therefore, is indivisible. Whence then comes the concept of divisibility? This word, *divisibility*, may be taken in its proper sense, or in an improper sense, that is, to mean *multiplicity*. Divisibility, in the proper sense, has its origin in the mind, or, more generally speaking, in perception. For instance, space is one and indivisible. But the human mind can consider a limited space. By this act, it seems that space divides itself, because the mind confines its attention to that portion of space, dividing it from the remainder. But it does not by any means follow from this that space is truly divided, since in itself it is altogether indivisible. Indeed, although with my imagination I outline in space a sphere of a metre in diameter, I do not thereby prevent space from extending beyond this sphere, as it did before I imagined this spherical space, or hinder the space beyond my sphere from forming an uninterrupted *continuum* with the space occupied by my sphere. The same thing would be true, if the sphere limiting space were a real, corporeal sphere. Divisibility, therefore, in its proper sense, is not real, but merely relative to the operations of the percipient.

564. Let us now take a piece of continuous matter and divide it into two parts. Is this a true division? Properly speaking, it is only a *multiplication*, whereby, instead of one individual, I have two. In fact, in order to have real division, I ought to have the individual divided. But I have not the individual divided: I have only two individuals. Certainly, the two individuals which I now have are not parts of one individual, because the two portions of continuous matter, being divided, no longer form one whole, but two wholes. They are not parts, because the

whole of which they would be parts, no longer exists. It will be said that they may be considered parts of that whole which existed before the *division*. Most assuredly they may be considered so *by the mind*. But it follows that their being parts of a whole is due solely to the act of the mind. They are not parts when they are divided; they were not yet parts when they were united and formed a continuous whole. The divisibility of matter, therefore, is, we repeat, a manner of considering altogether belonging to the mind: it is relative to the operations of the mind.

565. Might, then, the matter, before it was divided, have been considered as an individual? Is continuity sufficient to give unity to this being which is called matter? This question will be more thoroughly discussed by us when we come to speak of matter. At present it will be sufficient to remark that the individuality of matter is, at best, a very imperfect individuality, because matter, as matter, has no unifying principle. The individuality of real being, therefore,—its unity,—lies properly in that being which has the nature of *active principle*. The word *principle* contains unity and indivisibility in its very concept. Now, *beings having the nature of principles* are either sensitive or intellective beings. We must, therefore, speak of the individuality of these.

566. True individuals, then, are sensitive principles or intellective principles.

These principles are first acts, and such that, in the order of feeling proper to them, they are independent. The second acts, dependent upon the first, receive unity and individuality from these. But it is not absurd to suppose that, within a first sensitive act, there springs up a second, which is immanent and, in its turn, becomes dominant over that very act within which it has arisen. In this case, having become independent, it constitutes another individual. I say that independence must be in the order of feeling. By this I mean that the individuating feeling must have no other greater feeling

dominating it by its activity. Let us apply these principles of the nature of individuality to the question we are now treating.

ARTICLE II.

The Individuality of Man as Based on Intuition.

567. Let us begin with the individuality of man. It is easy to see that no brute-animal can have that special individuality which belongs to the rational animal, man.

568. Man receives his peculiar individuality from the intuition of universal being, which constitutes him intelligent.*

This intuition is a most simple act, of a nature altogether foreign to space, just as being, which is in itself object, is perfectly simple and unextended. Now, in man, the principle which intuites being is identical with the sentient principle, whence this single common root of the two principles has been called by us the *rational principle.* It follows that this sentient principle in man, in so far as it identifies itself with the intelligent principle, is perfectly one, simple and foreign to space, which belongs only to the term of its act (the felt). The singleness and simplicity, therefore, of the first intellective, immanent act constitutes the individuality of man.

569. This individuality is marked by a most important characteristic, which distinguishes it from that of the brutes, and which is due to the nature of ideal being, whereby man is informed. Ideal being is inexhaustible; nay, it is even immutable and immodifiable. For this

* The principle of individuation is reality, as we have shown in the *Anthropology*, Bk. IV, chap. i, art v; nos. 782-788. Man is a reality. In order, therefore, to discover what individuates him, we must inquire what constitutes him a real being. Moreover, we must say with regard to indeterminate ideal being what we have said of space; that is, that although we may conceive as possible a being having by nature no other act than the intuition of indeterminate ideal being, still this being would necessarily be single: if the mind should try to conceive two, and think it could do so, it would be deceiving itself. It would either think the same identical being, or else it would add to being some other differential act, which would be contrary to the hypothesis. On the law of *excluded equality*, see *Theodicy*, nos. 617-634.

reason, it informs man without suffering in itself any change or any restriction. It is man that is united to it, and not it that is united, properly speaking, to man. It is in itself, it has no union with other things, although other things may have union with it: the union is relative to these, not to it. These feel themselves bettered by their union with it, and this feeling which forms their union does not fall within ideal being, but lies solely in the intuiting being.

570. When we understand all this clearly, and do not apply to ideal being the concept of union drawn from finite things which unite reciprocally, then, and only then, shall we understand how reflection is possible for man.

Man, in so far as he is an intellective being, is informed by ideal being and exists through it. At the same time, he who exists through ideal being, likewise finds ideal being in which to contemplate himself as informed by ideal being. This is the very meaning of reflection.

Reflection presupposes (1) the intelligent principle of which ideal being is the form; (2) ideal being in which it sees itself as informed by ideal being.

Ideal being, therefore, performs two parts in reflection, the part of *form* to the intelligent principle, constituting this intelligent principle, and the *means* whereby this intelligent principle, as already subsistent, is known. It is, therefore, ideal being that applies itself to itself through its own nature, which, as we have said, is inexhaustible or immutable.

571. Now the reflection which we have described gives birth to consciousness in man, that is, to cognition of himself, and through the process of various operations already indicated by us the *Ego* is posited. Thus, human individuality is perfected by means of self-consciousness. Man feels and knows himself; he knows and says to himself that he is a single principle (consciousness of individuality). This individuality, likewise, cannot be found in the brute; individuality cannot be known save by man.

ARTICLE III.

Individuality of the Brute.

572. What then is the individuality belonging to the brute? It must consist in feeling, in the singleness of the sentient principle. Now, we have drawn a distinction between a quiet and uniform feeling and a feeling of excitation. Hence there are two principles of individuation.*

573. If we suppose the fundamental feeling to be quiet and equally diffused in a given *continuum*, it is clear that the individuality would consist in the single sentient principle, in which all this continuous exists; because, as we have said, the continuous would not be continuous and therefore one, if it did not exist in the simple.

574. But if we suppose that movements take place in that continuous aggregate of elements, the excited feeling will increase in intensity in certain points of it. And the sentient principle is most active where it is most intense. Now, where it is most intense, there is most of the sentient principle. Hence, the sentient principle in this case is one and, therefore, individuated, in so far as it extends to all the continuous; but it has two acts, with the one of which it embraces all the felt continuous, with the other it accumulates in a determinate part, or in different parts, of it. The sentient principle, in so far as it is put in act with greater intensity, individuates itself by becoming dominant and independent.

* That there are in matter grades of absolute condensation, that is, condensation not due to greater or less porosity, is the opinion of Glisson and others. This opinion we cannot yet consider as more than a simple possibility. In fact, porosity, or the existence of intervals between element and element, seems to us a sufficient ground of explanation for every kind of condensation that falls under our observation. But if we suppose the condensation of matter in the most minute elements to be gradual, we must also suppose the fundamental feeling in them to be gradually accumulated. Then the centre of the atom must be the seat of the highest grade of uniform feeling, and in this way there will be a third ground of animal individuality, a third principle of individuation.

575. Let the various cases be distinguished. Let the first be that in a continuous equably felt there arises, through the excitation of movement, a greater intensity of feeling limited to a single small portion of space. Here the individuality forms itself, because the feeling acquires the individuality of excitation, which prevails through its intensity. What forms the basis of this individuality is the act whereby this principle feels more intensely, and operates more actively, in the space indicated than elsewhere; and the principle which feels most may also be that which feels least, and not *vice versâ*.

576. Now let us suppose two small spaces in the same continuous, in each of which the intensity of feeling has risen to the same degree. The individuality of feeling would not be taken away, but there would be two individuals, instead of one, because the act of greater intensity adhering to the one space, could not be the act of greater intensity adhering to the other, since the intensities are equal. At the same time, the sentient principle which feels in one of the two spaces would embrace in its feeling all the continuous, on the principle that what feels the more can extend itself to feel the less; and the same may be said of the sentient principle inherent in the other space. The result would be a single body animated by two souls communicating with each other, two individuals substantially united. Examples of such individuals we find in the bicephalous monsters, annulates, polyps, gemmiparous, and fissiparous animals, &c.

577. But let us take a third case. In a given continuous, let the feeling be accumulated and excited in different spaces and in different degrees. If one of these excited and accumulated feelings is stronger than the other, and hence the centre of an instinctive activity, so great that, with the help of the proper organization, it can overrule the activity of all the other feelings, and so hold them in check, so regulate them to its own advantage that there spring from them harmonious movements calculated to keep the whole in unity; in this case we shall have a

single animal more or less perfect, and this, because, although there exist several individual feelings in the same body, still they cannot show their individuality externally, on account of the servile state in which they find themselves. And this is probably the case with all those creatures which we call animals, and especially with the more perfect of them, in which, although there may be separate feelings, and instincts correlated with them, still that which prevails and dominates, and that which in the state of health renders all the organs composing the body harmonious and accordant, is one.

ARTICLE IV.

Individuality of Man in so far as it is Based upon the Perception of an Individuated Animal Feeling.

578. Let us now consider the individuality of the animal as connected with, and transfused through, the individuality of man. Animal feeling is united to intelligence through the *fundamental perception* which we have described, and thus its individuality is transfused into the human individuality.

579. Hence, again, man alone can have the consciousness of his own animal individuality, whence it comes to pass that, if in the same body there could be other minor feelings that could not be individuated, man could have consciousness only of that greatest feeling which he naturally and habitually perceives.

580. For this reason those parts would be insensitive for us, whose motion did not modify that fundamental feeling which is habitually perceived by us and of which, therefore, we can be conscious.

581. And here, once more, we see the reason why not every movement produces a sensation.

582. This will become more clear from the following considerations. Let it be observed, in the first place, that this is the law of the fundamental feeling, that, although it

diffuses itself in certain parts, still it cannot make known to us the location of these,* since this word *location* signifies merely a relation of the parts to each other determined by superficial sensations. Now, experience shows us that not every movement in the parts which are sensitive for us produces sensation. The retina, which is so sensitive to light, may be rent without there arising in it any sensation observable by us. The laws of *sensiferous motion* are as yet but little known; but we may make the following conjecture: The different tissues of the human body are organized out of molecules more or less compound. In other words, there are, first, the elements, out of which are formed molecules of the first order. These form other molecules of the second order; these again others of the third order, and so on. Now, according to the hypothesis which we have made and of which we are speaking, feeling always adheres to the first elements. But does it adhere also to the molecules of the first order, second order, third order, and so on? I mean, does every molecule of whatever order have its feeling continuous with that of another, or is this feeling continued only by the elements and by certain determinate molecules which cannot change their relative position, unless the elements of which they are composed also change their relative positions? I think it is extremely probable that molecules are merely organizations more or less suited to the internal motion of the elements.† Now we have laid down as a condition of excitation that the elements to which feeling adheres, must, when they come in contact, move, rubbing against one another, and so changing frequently the continuous extended which is the term of feeling. This being admitted, if we stimulate a membrane composed of molecules of the fiftieth order, in such a way as to make these molecules, but not their elements, move and rub against each other, and if then it happens that the elementary

* *Anthropology*, Bk. II, sec. i, chap. viii, art. iv; nos. 154-179.

† If, when the molecule moves, no movement arises in the internal parts of it, and if it is to these internal parts that feeling adheres, the excitation of the external parts of the molecule cannot continue.

movement does not propagate itself as far as the centre, which is the term of the dominant feeling constituting man, we shall not have excited any sensation; but, if we find means to cause an internal movement to spring up in the elements, in such a way that it propagates itself and makes itself continuous with the central internal movement, then we shall thereby have determined the sensation which is proper to man and capable of coming into his consciousness. In fact, sensation does not arise through the absolute motion of the body and the organ,* but in virtue of the relative motion among the sensate elements, and this motion must be continuous with that of the centre, because, if the internal movements were limited to one part of the body and did not extend to the centre, there would arise a feeling of excitation different from the principal feeling, since the motion would lack continuity, just as the feeling of continuity is multiplied, if the continuous becomes divided and discontinuous.

583. It is only, therefore, on the conditions mentioned that the sensations produced will have reference to the individual feeling of man, which is the principal fundamental feeling of those that fall within the human body. And here we seem to discover the probable reason why the shock of the nerves must be propagated to the brain in order that we, who are the rational principle of the greatest feeling, may have the sensation of it. And if such sensation is felt where the stimulus has been applied, this means that that part likewise enters into the felt of the principal feeling; but, in order to belong to it, it must communicate with the centre, since, if it is divided from it, it belongs to another feeling, because from the centre, that is, from the unity and continuity of the term of the principal feeling, the fundamental feeling of man receives animal individuality.

584. In order, therefore, that an excitation may produce an individual sensation, it is necessary:

1.° That the movement take place in a felt continuous;

* *New Essay*, vol. ii, nos. 806-809.

2.° That the movement take place in the elements to which feeling adheres;

3.° That the movement be propagated to the seat of the individuality of feeling, that is, to the seat of that felt which corresponds to the greatest fundamental feeling, individuated in virtue of this very condensation, so that the sentient principle feels a continuous motion (*i.e.*, motion in the continuous) and not an interrupted one.

CHAPTER XVIII.

ON LIVING FLUIDS.

585. What has been said seems to clear the way for a solution of the much-disputed question respecting the fluids which circulate in animal bodies, and which form, perhaps, eleven-twelfths of the weight of the human body.

We see clearly:

1.° That they may live with a feeling different from ours, with a feeling, therefore, which would not fall within our consciousness.

2.° That it is not absurd to suppose that these fluids, or a part of them, are terms of our fundamental feeling of continuity, although we have no excited feeling of them, provided we admit that the sensitivity apparent to our individuality is not attached to the molecules of the fluid, but to the elements of them. In this way, the fluid being unstable, the elements composing the fluid molecules, for want of stimuli, do not get displaced. This makes them appear to us insensible, because the attrition of their molecules does not occasion an attrition between elements continuing to the centre of the human feeling.

586. Be this as it may, we will borrow words to set forth the arguments which have moved a large number of learned men to recognise vital properties in those fluids, because this fact, if it is verified, confirms the theory given above and is explained by it. M. Adelon says: "At first the belief in the vitality of the humours was almost universal. This vitality was inferred from the rapidity with which they become decomposed as soon as they are separated from the living body. According to this opinion also, it was supposed that every humour was engaged in

a continuous internal motion, whereby it maintained and repaired itself; that the blood, for example, in hæmatosis, acted in a manner analogous to that in which a solid performs its own nutrition.

"Later on, the physiologists of Montpellier went further, and did not hesitate to attribute the vitality of the humours to that sensibility whereby all the solids of a body are said, by abstraction, to be animated. This view was based on the following considerations:

"1.° A general instinct affirms that the life is in the blood: the chief actions of the animal economy tend to the formation and renewal of this fluid. It is the substance which restores the organs and the stimulus without which they cannot act. The effusion of it brings with it the loss of life.

"2.° Certain substances introduced into the blood modify it with a rapidity too great to be attributed to chemical action, to fermentation, to putrefaction, or to the action of solids modified by these substances: we must, therefore, admit that these substances act directly upon the vitality of the blood. Thus Boerhaave and Van Swieten say that a small quantity of scammony had the effect of suddenly coagulating the blood, and Felix Fontana, having injected the veins of a living animal with the poison of a viper, found that it died in an instant and that the blood suddenly coagulated, an effect which does not take place in a dead animal. So, likewise, in the practice of medicine, we find that astringent, weakening, and antephlogistic drugs, even when administered in small doses, produce effects so sudden, and so out of proportion to the doses, that we are compelled to attribute them to the direct action exercised upon the vitality of the humours. A few grains of nitre, for example, put in any beverage are very refreshing, and yet the dose is so small that the effect cannot be explained physically. It seems, say the partizans of this system positively, that the vitality of the humour is modified and that the part of the humour which received the action afterwards imparted the impression to the whole

mass. At all events, they cite, as proofs of this assertion, the facts that Schulz and Benefeld by making stiptic injections into the mouth, stopped hemorrhages in other parts of the body, and that Fracassato, by injecting a stiptic fluid into the crural or jugular vein of a dog found that the whole mass of blood instantly coagulated. They likewise adduce the authority of Treind, who attributes the power of resolvents to a direct action on the vitality of the fluids, and that of Pringle, who explained in a similar way the action of antiseptics and maintained that they prevented the putrefaction of the blood by increasing its vitality. All these facts seem to Barthez, whose words we transcribe, to prove that there is an agreement between the different portions of the humours and, consequently, that they are pregnant with vitality.

"3.° The affections of the soul modify the state of the fluids: this is a fact which cannot be gainsaid. Boerhaave and Mathes saw anger change the milk of a nurse so as to render the children suckled by her epileptic. Anger often gives to the saliva of an animal the power of transmitting madness and increases the deleterious power of the poison of poisonous animals. Now, is not the affection of the fluids in all these too sudden to be explicable by means of the solids?

"4.° It seems to be proved by observation that the conditions of temperature in fluids are different from those of the rest of the body, and, therefore, that this temperature is due to their special vitality. Hunter affirms that he found the blood of a temperature different from that of the rest of the body. Borelli and Morgagni say that in bleeding they have extracted blood entirely cold and yet not coagulated. Hewson and Dehain declare that they found the blood varying in colour, warmth, and density in the different parts of the body.

"5.° Finally, the partizans of the vitality and sensibility of the humours adduce in favour of their system the fact that the fluids, both in the state of health and in the state of disease, sometimes partake of the nature of

solids. Thus they observe with Spiegel that in weak constitutions the blood is very little liable to coagulation, and mention that Stahl and Cullen maintain that they saw the blood become inflamed on account of a general spasm, and epileptic persons give forth very fluid blood before an attack and very dense blood during the same attack."*

587. We are very far from granting that there are corporeal substances separate from our body, and yet capable, when applied to our body, of acting directly upon the vitality. According to us, body can act only upon body, and the foreign body, as body, can only act upon our body.

As to our body, the term of feeling, it is plain that when it is modified in the manner specified, feeling also must necessarily modify, accumulate, excite, and even multiply itself.† That the activity of the feeling which has the body for its term can act immediately on the feeling of the passive body is a conjecture which we have already made,‡ and it has appeared to us more probable, the more we have examined the phenomena of animal nature, so that the action of a living body upon a living body seems to us double, a material action and an action of feeling.

588. Indeed, according to this hypothesis, it is the feelings that unite and become continuous when the living molecules come in contact, it is the feelings that concentrate and individualize themselves, and that, when individualized, make other feelings depend upon them and that dominate the internal movements of the continuous to which they extend. Among these feelings there is action, communication, and sometimes harmony, sometimes strife.

589. Hence, although the fluids of the animal body be insensible to the animal itself, they may, nevertheless, be alive and invested with feeling, and they may be terms of

* *Dictionnaire des Sciences Médicales*, art. *Humeurs*.
† *Anthropology*, Bk. II, sec. i, chap. x; nos. 247-257.
‡ *Ibid.*

the feeling of continuity, although their movements are not able to excite it or to produce sensation, because their attrition is not the attrition of living elements, or because the excitation is not continued to the centre, that is, to the seat of the maximum feeling, or else they may be terms of another sentiment different from that of the animal to which they are supposed to belong.

And that the fluids of the human body, or some of them, may be terms of another feeling, is a fact which seems to be confirmed by the observations made by modern investigators on the globules contained in the blood. I shall speak of these observations in the words of an illustrious Italian physician:

"Gruithuisen found that the globules of the blood of animals having no hearts are the seat of a peculiar movement, which has been called *oscillatory*, for the reason that it really represents to the eye an oscillation and, so to speak, a balancing of the whole mass of the blood. Haller observed a similar motion in dying animals, when the impelling force of the heart diminishes or ceases, and Döllinger saw it in young animals when their substance was in the act of converting itself into blood. Besides this, Heideman discovered in the globules of the blood a slow contraction, which made them draw together into themselves, and sometimes took place when they came to rest. These movements, which can proceed neither from the heart, nor from the vessels, are altogether due to the blood and adumbrate in it the first manifestations of vital motion, and point to the steps by which nature gradually raises matter to a more elaborate composition and higher vital properties."*

590. But it is strange to hear some persons distinctly deny the life of the humours, and in medicine speak of nothing but solidism, when they might be undeceived by the simple reflection that liquids existed before solids, and that in the formation of nature, as well as in the generation of animals, the liquids come before the solids

* Bufalini, *Fondamenti di Patologia Analitica*, Milano, 1833, p. 268.

—a fact which throws light upon that very ancient principle which became the characteristic of the Ionic School: "Liquid is the principle of all things." Let us call to mind those observations which have now become so numerous, on the successive formation of the animal. The *vescica proligera*, which is contained in the ovum, itself contains a globular humour, which, however, is not capable of those regular metamorphosis which must give rise to the formation of the fœtus. But if it comes to be united with a globule of the prolific masculine humour, there spring up at once various reactions among all those globules and the elements of the liquid which contains them, and there is immediately formed the first element of the germ. This germ then draws round it other globules of the same *vescica proligera* and of the vitelline humour, which, continuing the same series of reciprocal actions, decompositions, compositions, begin to form a granulated gelatinous substance, which then, by the continuation of the same process, converts itself into cellular tissue, in which the vessels destined to distribute the nutritious humour begin to appear. After this the various tissues are constituted and the various viscera and organs formed, in the manner so well described by Wolff and our own Roland."*

591. Furthermore, in order to explain the fact of the assimilation of nutrition and of the reproduction of some parts of the body, we must have recourse to the life of the liquids.

"In the same manner," (I quote from the same author) "in the higher animals and in man the reproduction of certain parts, amputated or destroyed by disease, is effected. The reproduction of such parts always begins with the exhalation of an aqueous humour full of globules hardly perceptible even with the most powerful miscroscope. Gradually this humour condenses and converts itself into a granulated substance, in consequence of the metamor-

* *Sulla Generazione Spontanea, e sulla Natura dei Zoöspermi*, Lettera del Prof. Secondo Berruti al Prof. Medici.

phosis undergone both by those organic globules and by the liquid which contains them. As fresh globular liquid continues to be exhaled, diffusing itself among the granules and there undergoing new metamorphosis, a cellular tissue is observed to form itself, among whose cells the liquid deposited in it begins to flow with a certain regularity, until, through the continuation of the same process that gave rise to the tissue in the first instance, and by the gradual multiplication of reciprocal actions in proportion as more composite tissues spring up, there are formed at last new vessels, new muscular fibres, new nerves, &c." *

592. In the four known kinds of generation, the viviparous, the oviparous, the gemmiparous, and the fissiparous, the fluid particles which give life to a new individual separate themselves from the body; but people do not reflect sufficiently upon this very significant fact, because it is too familiar, although, in our opinion, it alone would suffice to show that there is life in the fluids.

Attention, therefore, will be more attracted by this other fact, that signs of life are observable even in particles which are separated from bodies by accident or not according to the known laws of generation.

Since Buffon,† who believed in the existence of organic molecules, many persons have devoted their attention to this question.

In Italy, Professor Botto‡ made special observations on the movements of the animal and vegetable globules suspended in various liquids, movements which do not seem explicable by mere mechanical, physical or chemical laws.

"The organic globules move with enormous rapidity, at one time seeming to seek each other, at another, to flee from each other; sometimes two globules which have come

* *Sulla Generazione Spontanea, e sulla Natura dei Zoöspermi*, Lettera del Prof. Secondo Berruti al Prof. Medici.

† Cocchi had previously observed the globules in the blood, and calls them *vivacissimi nuotanti* (most lively swimmers), after Malpighi, who was the discoverer of them.

‡ *Observations Microscopiques sur les Mouvements des Globules végétaux suspendus dans un Menstrue.* Par J. D. Botto, Professeur de Physique à l'Université Royal di Turin. *Memorie della Reale Accademia delle Scienze di Torino*, Ser. II, vol. ii, p. 437.

into contact spring asunder with great force; sometimes two globules, having met, continue united, and even undergo a kind of metamorphosis whereby they come to form a single body, a single substance endowed with less apparent mobility than the globules which composed it. This substance then makes itself a centre to which various other globules congregate, and these, as soon as they reach it, disappear and, by the metamorphosis which they undergo, not only increase the volume of that substance but also change its form and nature." *

593. There is no reason to conclude from these observations that there is an action *in distans* among these globules. Nothing proves to me, as I have already said, the necessity of admitting attraction between distant bodies, and what induces me to deny it is the contradiction which seems to me to lie in this concept. The globules may have an internal movement which moves them from one place to another. Besides, since they move in a fluid, whose particles I suppose to be in contact and to be endowed with feeling, they may very readily extend their action to other globules floating in the same liquid, by the action of feeling, which in the same fluid may become continuous, although it is only in the globules that it occurs in sufficient accumulation to form centres of greater actions.

594. Moreover, we must remember that between the greatest feeling and the other partial feelings there may be diverse relations, which do not cease, except when the continuity of the sensitive molecules ceases. When these sensitive molecules, whether grouped together and related to a centre of feeling, or disconnected, separate themselves from the animal body, they form so many separate individual feelings. But, before they entirely separate themselves, their feelings may be more or less closely united to, and dominated by, the principal feeling, or, at least, they may be influenced and kept in a certain activity by it.

595. The chief feeling of an animal may influence the

* Berruti, *Sulla Generazione Spontanea*, &c., vid. p.

preservation of other individual feelings in various ways, which may be reduced to two, the one subjective, directly rousing those feelings and thus giving them the intensity of act necessary to individuate them, the other extra-subjective, supplying the given centres with nutriment or applying to them extra-subjective stimuli capable of keeping up the same excitation.

596. The first or subjective way, in which the chief feeling of an animal directly excites feeling in one part of it with so much force as to individualize it, we find in the generative act, at least in the more perfect animals, in which the sexes are distinguished. I believe that the feeling inherent in the particles which become a new individual receives from the generative act an exaltation of the kind and degree necessary to individuate them, although, of course, this individuation must be aided by the separation of the seminal substance from the individuals to which it belonged. In the female it does not detach itself completely, but adheres less closely than before.

597. As to the second or extra-subjective way, we have many examples of it, notably in the fœtus. This receives from the mother not only nutriment, but, also red blood. Whether the mother extends her fundamental feeling to that of the fœtus, and excites it directly I do not know; but if this were the case, it would serve to explain maternal love. But, inasmuch as she supplies it with her own red blood, by means of the umbelical vein, and this blood is put in motion by the maternal feeling, it is this feeling that sustains the extra-uterine life of the fœtus, by supplying the principal and incessant stimulus that produces life.

598. Again, there are many animals that live in other animals, and their life is so bound up with that of the animal which contains them that they die along with it. They are never found alive in dead bodies, or apart from the body in which they live, although they contract for a short time in tepid water and then die. We have not yet sufficient data for determining in what way their life depends upon the life of the larger

animal; but it does not seem impossible that the chief feeling directly communicates some of its own excitation continuously to them. If this is not the case, the chief feeling must, by its activity and by the operations which it performs in the whole body, supply nourishment to these little lives, and very probably the extra-subjective stimuli, which keep their feeling limited to the degree of intensity necessary to render them individuals.*

599. It is worthy of observation that, among the animals of which we are speaking, some live only in healthy animals, whereas others are found only in diseased animals. The law according to which they are produced and sustained is the same in both cases. The chief feeling, in the condition of health, has an activity, and produces in bodies movements different from those which it produces in the condition of disease, hence it must further the development of different centres, and produce different organizations in the sphere of the total organization.

600. Among the animals inhabiting healthy living bodies, the zoösperms hold the first place.

"In the sperm tending to corruption, as in other liquids, there are, not unfrequently, developed infusoria very different from zoösperms. Moreover, the zoösperms are more numerous and mobile, the farther the sperm is from corruption, and the greater the physiological activity possessed by the organs which secrete the sperm, and these are conditions altogether opposite to those required for the spontaneous development of infusorial entoza. The zoösperms disappear as soon as signs of putrefaction begin to show themselves in the sperm, and it is just then that infusoria begin to appear. Animal parasites develope in individuals that are young, weak, of bad constitution, ill-nourished, exposed to the inclemency of the seasons. On

* As we have already said, granted that there is a chief feeling whose term is a given excited continuous, if within this continuous there is organized another little machine, if I may so express myself, whose internal movements are capable of exciting feeling incessantly, but not of propagating it to the seat of the chief feeling, this machine is a little animal, individuated by this very fact.

the contrary, zoösperms appear only at the moment when the body has attained a large part of its development, and they are produced with greater facility in proportion as the individual in which they occur is robust and well fed, and diminish in number, or even cease to exist, through the action of causes that undermine the health, that is, under the very conditions that favour the development of parasites."*

Now, zoösperms are not only confined to the healthy body, but they seem necessary to it, since they seem necessary to generation.

"Is it allowed" (we quote again from the same author) "to look upon the presence of zoösperms in the sperm as an accidental phenomena, when we see that they do not exist in the sperm of infertile animals and that their presence in this liquid is a sure criterion of its power to fecundate?" The experiments of Prévost and Dumas, as well as those of Lallemand,† clearly prove that when, by repeated filtrations, the sperm is deprived of its zoösperms, it becomes quite incapable of fecundation, whereas a very small portion of the substance which remains in the filter, and which is composed mainly of zoösperms, is sufficient to fecundate many ova.‡

* Prof. Berruti, whose words we borrow, because we could not say anything better, denies that zoösperms are animals, designating them merely as *organic molecules*. But this seems to us a mere question of words. In the zoösperms we have spontaneous motion; this presupposes feeling, individual feeling and, therefore, organization. These are to us the characteristics of the animal properly so called, characteristics which distinguish it from separate animate elements not yet organized.

† The important memoirs of Lallemand on zoösperms are to be found in the *Annales des Sciences Naturelles*, vol. xv, pp. 30, 257-262.

‡ The opinion of Roland seems to us very probable. This writer holds that the nervous system is contributed by the father, and the cellulo-vasicular system by the mother. This opinion does not differ widely from that of Galen, who said that the seed of the father turns into brain, which he, therefore, supposed to be prior in formation to the heart. Prévost and Dumas, moreover, made the hypothesis that the zoösperms alone serve for fecundation, converting themselves into a nervous system. They called attention to the linear form of the zoösperms, having one broad extremity which might become the brain, while the tail changed itself into the spinal marrow. The objection raised against this hypothesis, to the effect that one system separated from the others could not live, whereas the zoösperms live, does not seem to me to carry much weight. The essence of the animal all lies perhaps in the nervous system: the other parts are extra-subjective supports and stimuli, or at least, parts in which only the feeling of continuity is diffused, and not the feeling of excitation (at least in its

It seems, therefore, that these small animals are as essential to the larger animal which contains them as the generative faculty is.

601. The animals which seem to develope in bodies through disease, or which produce disease, are of many kinds, entozoa, mange-worms, lice, &c.

"Every species of animals has its peculiar entozoa, which cannot live in other species, and perish as soon as they leave the body in which they were born, and each portion of the body of an animal can be the seat of only certain kinds of entozoa."

Amongst these the hydatides or vescicular worms, which have been divided into five main classes, each with smaller subdivisions, and which also live through the influence of the life of the larger animal in which they are found, are separated and isolated by means of the parenchyma of the organ in which they develope and through the coverings or vesicles in which they are contained. The walls of the vesicles seem to have no small influence in limiting their particular internal excitation, and preventing it from extending and communicating itself to the larger animal which gives them lodging, nutriment, stimuli,* and perhaps also a portion of its own excitation. This limitation must contribute to the individuation of those small fundamental feelings. It must also be aided by the vesicle formed by each hydatide; and it seems

normal state) which is characteristic of the animal. The nervous system cannot live by itself alone, because it requires nutrition and stimuli. But the zoösperms derive stimuli and nutrition from the animal in which they live, or into which they pass through the act of fecundation, and if they show themselves alive even when they are removed from their natural place, it is only for a short time, and it is probable that during this time they receive some nutrition or stimulus from the fluid in which they are placed in order to be observed. If all zoösperms are originally globular, as Lallemand supposes, and afterwards acquire the caudal appendage, this only proves that they are capable of a certain growth; and it must also be observed that, according to the assertion of Czermak, there are as many kinds of zoösperms as there are species of animals provided with prolific liquid.

* Those species of hydatides which have been denominated acephalocistic (whether furnished with eggs, buds, or grains), when they develope in a part of the body abundantly provided with cellular tissue, are found to be surrounded with a stratum of that tissue, more or less thick, and to receive from it many blood vessels. From this they must derive nutriment, excitation, and perhaps also a share in the excitation enjoyed by the fundamental feeling of the larger animal.

certain that by means of a tegument of more or less consistency and more or less insensitivity, which encloses all the entozoa, both their organizations and their special fundamental feelings are limited to a small space, the walls of the tegument forming, as it were, their boundary line.

As to the mange-worm, "it appears from the researches of Cassel, Raspaille and Ranucci that this creature almost constantly accompanies scabies, and, moreover, that it is not found in the scab pustule itself, but at some little distance, the fact being that it immediately withdraws from it, boring itself a way under the epidermis, and settling itself at some distance from the pustule itself. Another species of worm was found by Roland, Martinet and Murny in certain tumours upon lepers, and Dr. Simon of Berlin has recently discovered and described a third species of worms inclosed in the hairy follicules of man."*

The arguments which go to prove the spontaneous generation of lice in children, both when they are healthy and when they are suffering from phtheirasis, have been set forth by Tournier,† Sichel,‡ Burdach,‖ and others. "Every species of animal is subject to a particular variety of lice, and often an individual of a particular species of animals living alone, and far from every other individual of the same species, is found to be molested by the lice that are peculiar to its species. This is so true that Patrin, having hatched partridges' eggs under a hen, found upon the young partridges lice peculiar to that bird, and not one of the lice belonging to the gallinacea."

602. All these living creatures seem to be engendered by the greater or principal animal, when in an unhealthy or morbid state. Spontaneous generation manifests itself by far the most plainly, when the dead animal, or even the dead vegetable, is undergoing disorganization. How many

* *Gazette des Hôpitaux*, 29 Nov., 1842. *Observations sur les acares vivants dans les follicules pilleux de l'homme par le docteur Gustave Simon* (de Berlin).

† *Dictionnaire des Sciences Médicales*, art. *Cas rares*.

‡ *Historiæ Phthirialis veræ Fragmentum*.

‖ *Traité de Physiologie*, vol. i, p. 39.

forms of it present themselves to us when we infuse such substances in a liquid!

"Infusoria of different species are obtained from the infusion of different substances, coupled with different conditions of the water and the air which concur in the effect of the infusion. Thus the infusion of a vegetable or animal substance containing no azote will produce vegetable, rather than animal, infusoria; and, on the contrary, the infusion of an animal or vegetable substance rich in azote and poor in carbon will produce animal, rather than vegetable, infusoria. Different animal substances, when infused, furnish different infusoria, as was proved by Gruithuisen, who observed that the infusoria produced by musk are different from those produced by pus.* Even the different states of the same organic substance are sufficient to make it produce infusoria of a different species. Thus Spallanzani found that the infusoria produced by boiled clover seed were different from those produced by seed of the same plant not boiled."

It seems as if all these facts could not be explained, without assuming that there is feeling inherent in every element of matter and that the combination of these minute feelings and the harmonious unity of their excitations and accumulations—a combination and unity produced by the activity of the feeling itself and by the laws which govern it—is what produces these living organisms, these animals.

* Gruithuisen (*Organozoonomie*, Munich, 1811, p. 164) says, that having varied his experiments in more than a thousand ways, he obtained as many varieties of infusoria.

CHAPTER XIX.

ON THE DEATH OF THE ANIMAL.

603. According to the hypothesis explained above, the death of the larger, observable animals would be nothing else but the dissolution of their fundamental feeling and the consequent loss of individual existence, which would perish on account of the loss of the organization suited to that feeling of excitation which individuated it.

604. Still, in the event of such a case, no primitive and elementary feeling would cease to exist; but every such feeling, being compounded, accumulated and excited differently, or divided down to the last elementary state, would receive other individuations, and this would give existence to other animals and living elements. In this way, not only spontaneous generation would be explained, but all generation would be reduced to a single law.

605. Nor do I doubt that the metaphysical philosopher will find the theory quite possible and free from all pernicious consequences, nay even probable, provided he base his reasonings upon internal observation of the consciousness which he has of his own feeling; if he reflect that the sensitive soul cannot be known by him except through said observation, which renders him conscious of feeling, and that he cannot find the soul except in feeling itself, or define it except as a sentient principle; and, further, that in this sentient principle he must recognise a term, extended, variable, divisible and multipliable, and that the sentient principle cannot exist except as inherent in its term, for which reason it multiplies with the multiplication of that term.

606. The intelligent soul alone is a higher principle;

whence the intelligent being cannot lose its identity or its individuality through the loss of the corporeal feeling. This we shall explain more fully afterwards.

607. Some one will perhaps deny the universality of the law of which we have been speaking, and point to the fact that it has not thus far been possible to produce any animal by the mere union of inorganic substances. To this I reply that, even setting aside the boast of certain chemists that they have obtained some rudiments of organization by the mere reactions of inorganic substances, the objection does not necessarily interfere with the universality of the law conjecturally laid down by us, inasmuch as we showed beforehand that certain aggregates of elements could not, from being too simple, give signs of life sufficient to be observed, even if they had it. Whether the elements, in order to unite in a way to form that admirable organization without which life cannot appear or show itself externally in continuous extra-subjective movements, require a preëxistent organization, as a sort of cunning machine in which life may be elaborated and arranged, is a question altogether independent of the preceding.

608. Finally, the objection may be raised that, if we admit this theory, we shall have to assume as certain that the death of the animal is always due to disorganization, which is not proved, inasmuch as it has been found impossible in some corpses to discover any signs of disorganization.

I reply,

1.° That disorganization may escape observation, as in fact it has frequently done.*

2.° That, if life is inherent in the elements, which from their very smallness, are beyond the reach of all human observation, there may very well be lesions of organization which are not observable.

* See Houdart, *Etudes historiques et critiques sur la Vie et la Doctrine d' Hippocrate*, &c., Bk. III, sec. i, where certain facts are cited of corpses in which at first no disorganization was found, but in which accident subsequently revealed it.

3.° Finally, that the observations which have thus far been undertaken, with the view of discovering the disorders of organization caused by death, have all been made upon human bodies; and, since there is in man a principle superior to the body, it cannot be proved impossible that this principle has the power of separating itself spontaneously from the body without any previous disorganization in the body itself, although it would seem to me that in this case there ought to take place a momentary alienation rather than a true separation.

609. Here I must also add that, by the hypothesis of the existence of life in the primitive elements, we are able to reconcile two theories apparently contradictory, occuring in writers of the first rank, who cannot be believed to have contradicted themselves in too gross a way.

Men of the highest order of mind have claimed to prove the immortality of the human soul from the fact that it is the life of the body, arguing thus: The body receives life from the soul; therefore, by nature it is dead. But the soul, which is what gives life to the body cannot cease to live, because it is life itself.* Now this form of argument is most cogent; but it is equally valid for the soul of man and the soul of the brute; in other words, it proves in both cases that the principle which gives life to the

* St. Augustine says: "*Qui vero ejus (animæ) substantiam vitam quandam nequaquam corpoream, quandoquidem* VITAM OMNE VIVUM CORPUS ANIMANTEM AC VIVICANTEM *esse repererunt; consequenter et immortalem,* QUIA VITA CARERE *vita non potest, ut quisque potuit, probare conati sunt.*" (*De Trinitate*, x, n. 9.) In the same place he declares that by *body* he always means the extended, "*cujus in loci spatio pars toto minor est,*" and thereby excludes the sensitive principle, which is the soul of beasts, from being body. And even before him, St. Ambrose had said: "*Anima quæ vitam creat, mortem non recipit*" (*De Mortis Bono*, chap. ix). And later on, Cassiodorus uses the same argument, when he says: "*Immortales esse animas auctores secularium literarum multifarie probaverunt, dicentes: Si omne quod vivificat aliud, in semetipso vivit, anima autem, quoniam vivificat corpus et in semetipsa vivit, utique immortalis est*" (*De Anima*, chap. viii). St. Bernard uses words of the same tenor: "*Vita, anima est vivens quidem sed non aliunde quam ex seipsa: ac per hoc non tam vivens quam vita, ut proprie de ea loquamur. Inde est quod infusa corpori vivificat illud, ut sit corpus de vitæ præsentia non vita sed vivens*" (*Super Cant.*, Serm. lxxxi). Hence he infers the immortality of the soul. This form of argument was common among the Platonic philosophers, as we may see in Proclus, *Theol. Platon.*, Bk. III, chap. i and xxi; Bk. IV, chap. clxxxiv-clxxxix; in Jamblichus, *De Myst. Ægypt*, Sec. viii; Macrobius, in *Somnium Scipionis*, Bk. II, chap. xiii-xvii.

body, whether or not it have intelligence joined to it, cannot perish.

And yet these same famous authors, who reason thus, afterwards teach that the soul of the brute perishes.

How can they be reconciled with themselves?

610. By the theory that there is life in the primitive elements of matter, a life distinct from the organic life of excitation proper to the animal.

The original, primitive, latent life, which does not perish, is the life of the elements: to it the argument we have quoted applies perfectly. But the manifest life of animals does not consist merely in the primitive feeling; it requires excitation, continuity of excitation, regularity in the excitation, and, hence, an organization capable of producing a harmonious excitation in a perfect circle. The animal, therefore, perishes when its organization is destroyed; its particular life perishes; but there remains life, the principle of its life, namely, the soul adhering to the first elements into which the organism dissolves.

611. The other argument also for the immortality of the soul, derived from the spontaneity of motion,* is equally applicable to the sensitive principle and to the intellective principle, because both have the power of moving themselves under certain given conditions. It is, therefore, certainly cogent, not only to prove the immortality of the intellective soul, but also to prove that of the life of the first elements.

612. Hence it is no wonder, if some ancient philosophers, not having been able to distinguish the *life of excitation*, which belongs to the animals, from the *life of repose* belonging to the elements, maintained the immortality of the souls of beasts, as well as that of man. Among these was the Indian Buddha or Çakya-Múni, who said that these souls differed from each other only in respect to the subject in which they were found, thereby,

* St. Athanasius uses this argument in this form: "*Si anima corpus movet, nec ab alio movetur; consequens est ipsam a se moveri, et postquam terræ corpus inhumatum est, ipsam rursus a se ipsa moveri*" (*Oratio Contra Gentes.*, no. 33).

with a new error, distinguishing the subject of the soul from the soul itself.*

There are other arguments of no light weight that favour the theory of the animation of atoms, but we reserve them till they naturally come in as corollaries to truths which remain to be expounded (nos. 459, 460).

* Naigeon, *Philosophie ancienne et moderne*, Vol. I, p. 245. Many of the Platonists employed the same argument; that is, from the fact that the soul is the principle of motion, they concluded that even the souls of beasts must be immortal. See Plutarch. *Adversus Colot.*, and in *Romulus*; Apuleius, *De Deo Socratis*; Maximus Tyrius, *Dist.* xxvii, xxviii; Plotinus, *Enneads*, IV, Bk. VII; Macrobius, *Somnium Scipionis*, Bk. I, chap. xvii, and Huet, *Alnet. Quæstiones*, Bk. II, chap. viii.

CHAPTER XX.

ON THE SOURCE OF ANIMAL LIFE.

613. And here we may perfect our definition of the animal, by making it more clear.

We have defined the animal as: an *individual* being endowed with material sense and instinct.

What remained to be cleared up was the word *individual*. The preceding chapters have shown in what the individuality of the animal consists. It consists in a principal feeling dominating all the feelings diffused in a given felt extension.

Hence arises the difference between *living elements* * and *animals*.

614. The former have feeling alone; but animals are constituted only when four conditions are realized, (1) continuous feeling, (2) excitation, (3) organization capable of perpetuating excitation, (4) unity of organization and excitation such as to produce a principal and dominant feeling, which, having a greater activity than all the others in the same *continuum*, prevails over all the sensitive activities and thus individuates the sentient being.

615. Hence there may arise the question: Is there in Nature a special minister of animal excitation, by which, as by a principal agent, the organization is formed, restored and developed?

In the case of many animals, perhaps even of all, there seems to be such a minister, namely, oxygen. It is a fact with regard to animals having warm, red blood, that when

* The phrase, "organic molecules," used by Buffon, is not correct. If the molecules are organic, that is, organized in a way to perpetuate excitation (and it is only this arrangement or conjunction of molecules that deserves to be called an animal organism), they are already small animals.

any part of them is not watered with oxygenated blood, such part ceases to give evidence of animal feeling. This proves that in such animals the chief, individuating feeling no longer has sufficient activity to preserve or exercise its dominion without this exciting agent.

616. Hence, it was a very ancient opinion that animal life had its seat in the blood, an opinion which we interpret to mean that, in man and other animals that have attained a certain perfection of organization, oxygenated blood is the exciter of the individuating feeling.

The passage in Genesis in which the "blood of lives" (*sanguinem animarum vestrarum* *) is mentioned, was not well rendered by a certain celebrated author, who translated it by "The blood is the life." † Elsewhere, indeed, it is said that the life of the flesh is in the blood (*anima carnis in sanguine est* ‡); but not that the blood itself is the life.

617. It was maintained that the same opinion occurred in Homer, and that Empedocles ‖ and many others borrowed it from him. It is certain that it was introduced into the *myths* themselves, since it was fabled that the souls of the dead could not remember the things of the present life without absorbing the vapour of blood, or else drinking blood itself, an opinion which must in part account for the origin of the practice of sacrificing victims to the dead. I hope I may be allowed to cite the passage of Porphyry preserved to us by Stobæus. "Now, among

* Genesis ix, 5.

† De Maistre, *Eclaircissement sur les Sacrifices*, ch. i, p. 267. This writer commits another mistake when he says: "Le sang étoit le principe de la vie, ou *plutôt* le sang étoit la vie." No, the blood is not the life; but the life is united to the blood. Thus the same author gives an unfaithful translation of *Leviticus* xvii, 11, &c., where it is said that the life is in the blood, not that the life is the blood.

‡ In Deuteronomy xii, 23, it is indeed said: "The blood thereof is the life thereof; therefore ye shall not eat the life with the flesh;" which seems to mean that the brutes have *living blood*, in place of the rational soul of man; because the exciting principle of animal life is united to the blood. What is added in regard to not eating the life along with the flesh, must apparently be taken to mean that the substance containing the excitant principle of the life of the brute was not to be eaten.

‖ Tertullian, *De Anima*, chap. v. "*Animam effingunt Empedocles et Critias e sanguine.*" For other passages of ancient authors explanative of this opinion of Empedocles, see Sturz, *De Emped. Agrig. Vita*, &c., sec. 15.

those who beyond the river have put off the sense of human things, Teiresias alone preserves it. Hence the other denizens of the lower world know in the manner in which they in Hadês know; but they can recall nothing of human things, except after they have absorbed the vapour of blood, and then they know after the manner of that cognition of human things which is granted to souls through the absorption of blood. And even Teiresias, though furnished with the sense of human things, does not prophesy to the living until after he has absorbed the blood of sacrifices. Homer, indeed, like many others after him, think that human prudence is contained in the blood, and this is confirmed by many more recent writers, who teach that the blood, when inflamed by fever or bile, produces imprudence or folly. Thus Empedocles holds the blood to be the organ of prudence, saying,

"'Bred in the breaking surges of the blood
And most where thought doth circle in the breast;
For blood around the heart in man is thought.'" *

In all this we see that the sensitive soul is continually confounded with the intellective soul.

618. In Italy, Pliny reproduced the opinion that the life is in the blood.†

Recently it was reproduced by the Chevalier Rosa,‡ and afterwards in England by Hunter,‖ who laid down this proposition, which admirably corresponds with our

* Stob. *Eclog.* Phys. I, 51:

"Αἷματος ἐν πελάγεσσι τεθραμμένη ἀντιθροοῦντος
τῇ τε νοημα μάλιστα κυκλίσκεται ἀνθρώποισιν
αἷμα γὰρ ἀνθρώποις περικάρδιόν ἐστι νόημα."

Mullach, *Frag.* 372-374.

The authors who mention this opinion of Empedocles sometimes say that this philosopher made the blood itself the soul, sometimes that he placed the soul in the blood, sometimes that he derived the soul from the blood, sometimes that he held the blood to be the instrument of the soul or the first living. The passages of ancient authors may be found carefully collected by Sturz in his *Empedocles*, sec. 14. [Cf. Zeller, *Philosophie der Griechen*, Vol. I, p. 643 sqq., Third Edition.]

† *Hist. Nat.*, Bk. XI, ch. xc, 38, xcii, 29.

‡ See Gian. Rinaldo Carli, *Opere*, vol. ix.

‖ John Hunter, *A Treatise on the Blood, Inflammation and Gun-shot Wounds.* London, 1794.

view: "The organization has nothing in common with life."

619. The difficulty was that these celebrated observers of Nature did not see the difference between the simple quiescent life, which consists in mere feeling, and the continually excited life, which requires a suitable organization. At all events, it seems that we may gather from their experience the certain result that the animal life of excitation has its principal excitant in the blood.*

620. But this is not all. The experiments of Bichat proved that not the black blood, but only the red, possesses the power of exciting the animal life of man. Now it is known that the blood is rendered red by the oxygen which the animal draws from the atmosphere by respiration. Of course, it remains to be discovered whether fishes and other cold-blooded or white-blooded animals likewise receive the excitation which puts their life in act from oxygen, drawing it from water or elsewhere in some way.

621. Hence for many animals the atmosphere may be said to be the reservoir and perennial spring of animal life.

This seems to have been recognised by Empedocles, who, according to Theodoret, said: "The soul is made up of æthereal and ærial substance," and placed its seat in the heart.† And why in the heart? Because the blood, after it has been saturated with oxygen, passes from the lungs to the heart, whence Cicero writes: "*Empedocles animum esse censet cordi suffusum sanguinem,*" ‡ an expression which very clearly distinguishes the oxygenated blood, which goes to the heart, from the blood which, being impelled to the circumference by the heart, loses its oxygen. And since, in the process of breathing, the decomposition of the air is a kind of combustion and produces heat, Empedocles maintained that the soul consisted chiefly of fire, and that

* In the *Recherches Anséatiques*, vol. vi, p. 108, we are told that Hunter considered it a certain truth that the blood is a living fluid.

† Theodoret, *De Græc. Affect.*, Bk. V.

‡ *Quæstiones Tusculanæ*, I, ix.

minds were swift or slow in proportion to the greater or less heat of the blood.*

622. The authors, likewise, who ascribed to the soul the nature of air, as Anaxagoras, Anaximenes, Archelaus, Diogenes of Apollonia,† &c., seem to have had a like notion, just as had all those who attributed to it the nature of fire, as Parmenides, Leucippus, Dêmokritus, and even Heraclitus of Ephesus, who made fire the elementary principle, the substratum of all things, the universal agent, supposing that all the elements were animated by this principle.‡ He also seems to have identified or united light with fire. It seems to me that Empedocles derived many of his opinions from this source. And this, I think, is a proof that sometimes philosophers who seem to differ widely in opinion, may be reconciled with each other, as may be done here between those who considered the soul to be of air, and those who considered it to be of fire.

623. However, the very etymology of the words *soul*, *ghost*, *spirit*, &c., which all signify ærial substance, seems to show that the first inventors of these words arrived by mere common sense at the conviction that the animal, in breathing, draws from the atmosphere the motor of its life.

624. This opinion must perhaps be numbered among those that go back to the origin of the world. In the Scriptures the soul is called breath, and is infused by a breath from the mouth of God (*Genesis*, ii. 7; *Isaiah*, xlii. 5, and lvii. 16). Commenting on these passages, Tertullian says: "*Nam anima in substantia flatus est, ab effectu autem dicitur spiritus quia spirat.*"‖ Hence this author drew his erroneous doctrine of the materiality of the soul, which was afterwards cogently refuted by St. Augustine.§

* See the quotations in Sturz's *Empedocles*, pp. 446, 447.

† Stobæus, *Eclog. Phys.*, Bk. I, chap. xl.

‡ Aristotle, *Metaph.*, Bk. I, chap. iii, vii; *De Mundo*, chap. v; Simplicius in *Phys. Aristot.* Clemens Alexandr *Strom.* v. [Cf. Bywater, *Heracl. Ephes. Fragg.* 20, 22, 26, 77. *Trans.*]

‖ *De Animâ*, chap. x, xi. *De Resurrect. Carnis*, chap. xv.

§ *Epist.*, cxc. *Liber de Hæres.*,

625. Hence, if the ancient physical philosophers had been content to teach that the animal draws the excitant principle of their life from the atmosphere, they would not have been far from the truth; but, unfortunately, they confounded the intellective principle with animal life, and so went astray at the first step.*

lxxxvi; *De Gen. ad Litt.*, Bk. X, chap. xxiv.

* St. Gregory of Nazianzen, refutes this error in a poem upon the soul, which has been thus rendered:

Quin alia est nobis sententia nota
Quamdum luce fruar non unquam admisero Namque
Haud mihi communis mens est, quæque omnibus æque
Secta sist, aërea quæque in regione vagetur;
Sic etenim cunctis eadem mortalibus esset
Tractaque et efflata; atque omnes, vitalibus auris
Et qui pascuntur, truculentæ quique dedere
Colla neci, in cunctis essent; quod dicere stultum est.
Namque etiam nunc hos äer, nunc rursus ad illos
Se fundit, &c. (*De Anima*, Carm. viii.)

CHAPTER XXI.

SIMPLICITY OF THE HUMAN SOUL, CONSIDERED WITH RELATION TO THE INTELLECTIVE PRINCIPLE.

626. Let us now pass on to consider the human soul in so far as it is intellective; and here also let us consider *simplicity*.

Simplicity is a negative property, because it excludes the multiple, the extended, the material. Still, it helps us in no small degree to know the nature of the soul, because we do not consider it abstractly and merely as a property, but as inherent in the acts and operations of the soul, which give us positive knowledge. Now, knowing the soul positively by means of feeling and consciousness, as we have already said, we have only to find the differences between it and other things, chiefly between it and bodies, in order to arrive at a reflex and scientific knowledge of it. Such knowledge is made up of differences, shown in those negative properties which exclude from being all that is not being.

627. We affirm, therefore, that none of the intellective operations of the soul can be performed except by a simple principle, and that, therefore, the proofs of the soul's simplicity are as numerous as its intellective operations. Each of these proofs, when well analysed and meditated on, is in the highest degree convincing. For this reason there would be no end to what we should have to say, if we were to deal with each simply. Accordingly, in dealing with the intellective soul, we shall follow the same course that we followed in treating of the sensitive soul, whose existence can be shown from the analysis of every one of

the operations of the animal, although we confined our attention to a few of them. In making the attempt we shall limit ourselves to inquiring what simplicity of principle is necessary in order to make possible the first of the intellective operations.

628. I. What is the intellective soul? A subject which intuites universal being.

Now intuition is a simple operation, because its object is simple.

In fact, *universal being* is outside of space and time.*

But the subject which intuites it receives its form from intuited being. Therefore, the intelligent principle, whose entire activity terminates and rests in intuited being, is a principle outside of space and time, altogether simple and spiritual.†

Intuition, therefore, plainly shows the simplicity of the intuiting soul.‡

This is the fundamental proof of the spirituality of the intellective soul, a proof which it draws from its first act, from its formal being. It includes also all the others; for, if the other operations of the intellective and rational soul are found to be necessarily simple, the ultimate ground of their simplicity lies in the simplicity of the first act, from which the second acts are derived and developed.

629. II. The intuition of specific and generic essences

* *Restoration of Philosophy*, &c., Bk. I, chap. xliii-xlv.

† This is the inner reason why "*intelligere est actus qui non potest exerceri per organum corporale sicut exercetur visio*," as St. Thomas says, *Sum. Theol.*, Pt. I, q. lxxvi, art. i, ad 1.

‡ This capital argument is not new. Father Suarez sets it forth in these words: "*Objectum adæquatum intellectus* EST ENS, IN QUANTUM EST ENS, AUT IN QUANTUM EST VERUM; *ergo signum est, intellectum esse potentiam altioris ordinis ab omni sensu, ac proinde esse potentiam spiritualem et ab omni corporeo organo abstractam. Antecedens* NOTUM EST EX METAPHYSICA, *et ex discursu hic facto, quia intellectus attingit omnia entia corporalia et spiritualia, creata, et ipsum Deum increatum, substantiam, et accidentia, cæteraque omnia, quæ, ut cadunt sub una potentia, sub aliqua communi ratione accipi debent. Hæc autem esse non potest nisi ratio entis, vel intelligibilis seu veri. Ergo hæc est ratio adæquati objecti intellectus. Prima vero consequentia, nimirum potentiam, quæ tam universale objectum complectitur, esse supra sensum, videtur profecto per se nota. Nam sensus, seu potentia cognoscitiva* [improperly so called], *organica et materialis* (*idem enim sunt*) *est valde limitata potentia, ratione materiæ, ut jam declaratum est.*" (*De Anima*, Bk. I, chap. ix, n. 33.)

proves the same truth. These essences are all simple, free from space and time, and differ from universal being only in being clothed with certain determinations.

630. III. But what deserves very special attention is this, that the very fact which, at first sight, seems as if it must interfere with the simplicity of the intellective soul, and from which, in fact, certain objections to it have been drawn, is what most distinctly confirms it.

We have proved the simplicity of the sensitive principle from the nature of the continuous, which, as we have said, presupposes the simple in which it exists. *Extension*, therefore, is already unified by the sensitive principle, and furnished simple to the apprehension of the understanding. But *number* receives its nature as number from the unity and simplicity of the sensitive principle, which apprehends a plurality of things simultaneously and with a perfectly simple act. To unify a plurality of things into a collective whole, to number them, to draw from them by abstraction the concepts and the theory of number, is an operation which can be performed only by a mind and by a simple act embracing the many in one.

631. IV. This same argument, which shows that the soul is simple because it considers several things at the same time, with the same act, and in the same idea, yields the proof of the simplicity of the intelligent principle which is drawn from the syllogism and from all the acts of reasoning, as we have shown elsewhere.* Man, if his spirit were not altogether simple, would be unable to perform the operation of comparison, find the differences between things, their agreements and disagreements, order, means to an end, &c. All these operations presuppose a principle embracing a plurality of things in the unity and simplicity of one and the same idea.

632. V. Hence springs also the argument derived from the liberty of man, which requires a simple principle capable of choosing between two or more things. This

* *New Essay*, vol. ii, nos. 670, 671.

argument, employed by St. Thomas,* is set forth by Suarez in this way:

"All the material agents of which we have any experience act by a necessity of their nature, and all the brutes by a natural instinct, as is shown by the fact that all the things of the same species have a determinate operation and a uniform mode of operating; hence this determination proceeds from materiality. Consequently, the mode of operation of the rational soul, being quite different from this, proceeds from immateriality." †

633. VI. Aristotle and his followers, the Schoolmen, very correctly observed that the condition of the body is so limited and specialized that it admits only certain modifications and passions, which mutually exclude each other. Thus a body, while it is red, cannot be of any other colour. Hence the acts of the body only extend to that slight virtue which is in the first act of the body itself. But very different is the case with the virtue of the intellective soul, which understands all the things offered to it in the proper way, even the most contrary, compares them, &c. Hence the intellective soul cannot have the nature of body. This, in substance, is Aristotle's proof considered in its essential points, and stated in an exact form.‡

The reason why the cognitive nature of the soul is able to embrace all things is, that its first act, which determines its virtue, is informed by universal being, and this virtually embraces all entities without exception. Hence it has a primitive virtue extending to all beings. The body, on

* *Summa contra Gentes*, Bk. I, chap. lxv.

† *De Anima*, Bk. I, chap. ix, n. 35.

‡ Solid as this argument is at bottom, the form in which it was presented is defective, and this is perhaps the reason why it has been abandoned in modern times. The principle assumed by the Schoolmen as the ground of their demonstration was: "*Quod potest cognoscere aliqua, oportet ut nihil eorum habeat in sua natura*" (St. Thomas, *Sum. Theol.*, Pt. I, q. lxxv, art. ii), a principle which will not hold, because the soul knows even the soul, although it has the nature of it. We must, therefore, substitute for it another principle, namely, this: The acts of a being do not extend beyond the first act of the being which determines the virtue of it. But the first act of the body extends only to having certain modifications at once and no more. Therefore, even if these modifications were so many cognitions, which they are not, they would be few and determinate, whereas the soul is capable of knowing any being and many beings at the same time.

the contrary, not having an object distinct from itself, terminates wholly in itself, in its own particular nature. Thus also the sensitive principle has for its term corporeal extension; whence its virtue is limited to the modifications of which the felt extended is susceptible. But the felt extended, that is, body, is limited in the way we have mentioned. For this reason the sensitive principle is also limited by the limitation of the body, which constitutes the term of its first act.

634. VII. To this same proof we may reduce this other, which is very cogent and was frequently employed by the ancients.* The intellective soul conceives spiritual beings, for example, itself, the angels, God, and it can love them and will them as its own goods.† But the body, extended as it is, cannot, with its action, go beyond extension or reach that which is outside of it. The intellective soul, therefore, is incorporeal.

635. VIII. Finally, the *operation of reflection*, which the soul performs upon itself, is a most manifest proof of its simplicity and incorporeality.‡ For the body exerts no action upon itself. But this proof likewise follows from the first: for where is the ground that explains the reflection of thought upon itself? Whence is this faculty derived? It is due to the nature of *universal being*, the object of that first act which constitutes the soul. This object, indeed, being so universal as to embrace every

* "The soul," says Cassiodorus, "though overburdened with the corporeal bulk, yet with anxious curiosity weighs opinions, contemplates profoundly celestial things, cunningly examines natural things, and desires to know the highest properties of the Creator Himself. But, if it were corporeal, it would not with its thoughts regard, or be able to see spiritual things." *De Animâ*, chap. ii.

† St. Gregory Nazianzen, in his *Apologetica*, says: "*Magnum inter corpus et animam est discrimen. Nam sicut corpus corporalibas pascitur, sic anima in incorporeis saginatur.*" And Suarez, after having cited this authority, adds: "*Hanc etiam rationem fuisse unam es potentissimis argumentationibus Philosophorum, præsertim Platonicorum ad probandum animam esse incorpoream refert Tertullianus* (*Lib. de Animâ*, VI, c. x, 2, 3); '*Quia omne corpus,*' *ait* '*corporalibus alii judicant, animam vero ut incorporalem, incorporalibus, sapientiæ scilicet studiis.*' *Et eadem utitur Gregorius Nyssenus—eamque ex Ammonio refert: sic etiam dicit Marsilius Ficinus* (*De Theol. Plat.*, Lib. viii, c. 2). '*Animam pasci incorporea et æterna veritate*' *ac proinde incorpoream esse.*'" (*De An.*, Bk. I, chap. ix, n. 18.)

‡ This proof is employed by St. Thomas, *Sum. contra Gentes*, Bk. II, chap. xlix.

entity and, consequently, also the entity of the soul and of all its acts, the soul can find in it itself and its own acts and their objects, and this is reflection. And since being is at once the object of its intuition and the means of reasoning, it is able to apply being as a means of reasoning to being as an object of intuition, and so to reflect upon being itself, and by means of being, to reason about being.

CHAPTER XXII.

SIMPLICITY AND SINGLENESS OF THE RATIONAL SOUL.

636. If, therefore, the sensitive principle and the intellective principle are both simple, and if these two principles are identified in the rational soul, the rational soul is simple.

In fact, as we have already said, the *Ego* that performs one act is the same *Ego* that performs all acts; the *Ego* that operates by means of the body in one space, is the same that operates in all the other spaces where it chooses to operate; the *Ego* that operates in one time is the same that operates in other times; the *Ego* that suffers is the *Ego* that acts; the *Ego* that feels is the *Ego* that understands: it is always the same *Ego*, one and perfectly simple. Therefore the *Ego*, that is, the rational soul of man, is proved by its perfectly constant identity amid the variations of accidents, to be simple and spiritual (nos. 140-180).

637. But, if the simplicity of the soul, of every soul, is indubitable and clearly manifest, how manifest is the absurdity of supposing it to be extended! Still, though there are other undeniable proofs that man is one and can have but one soul, nevertheless, a kind of doubt continues to recur to the mind, shaking, to some extent, its firm belief in the truths discovered. This doubt is due to the following considerations:

1.° The proof of the unity of the human soul deduced from consciousness, that is, from the unity of the *Ego*, does not remove the doubt that, outside of the *Ego* and in connection with the *Ego*, there may be another sensitive soul.

2.° Consciousness does not show that all the actions which take place in man are due to the *Ego*, in such a way that the *Ego* is the sole operative principle in the human being, but that many things take place in man which the *Ego* is not conscious of performing, and others to which the *Ego* expressly opposes itself, as for example the animal movements of his baser part; finally, that certain vital operations, as for example, the circulation of the blood, are almost entirely beyond the jurisdiction of the rational part, and, therefore, are performed by another principle.

3.° Man, himself, when he acts according to intelligence, seems to be quite a different being from what he is when he acts according to animality, and sometimes he desires to lose himself so far in the delights of sensation, that the functions of intelligence are suspended in him, which he could not do if he were merely a rational soul.

4.° The proof deduced from the oneness of the principle of intelligence and sensation (apart from the fact that it is not necessary to attribute every sensitive act to the principle of the intellective acts) demonstrates nothing more than the existence of a single intellective principle, which sometimes in its actions associates and identifies itself with the animal principle: it does not prove that this animal principle does not sometimes show and, therefore, possess, an activity of its own, and, hence, in such cases, is not a principle different from the principle of intelligence.

It appears that, moved by these reasons, some grave philosophers have given to man two souls, the one intellective, the other sensitive, and that in substance these same reasons, or others similar, induce physiologists at the present day, almost universally, to distinguish the principle of animal life from the human soul.

638. These difficulties are not to be made light of, and, indeed, they contain a grain of truth; but they prove nothing against the doctrine of the singleness of the soul of man.

For there is the clearest distinction between the two questions:

(1.) Is the soul of man one and simple? and

(2.) Does this soul, though one and simple, possess two distinct activities separable from each other, but so united that, during their state and act of union, the principle of the one identifies itself with the principle of the other, that is, that the two have a single principle termed the soul?

639. Now the proofs adduced by us show that both these questions must be answered in the affirmative.

Because,

1.° The proof derived from the unity of the *Ego* shows that, if anything happened in man which could not be attributed to the intellective principle, this activity would not be another human soul, but an activity not belonging to the human soul.

640. 2.° The proof drawn from the fact that the sensitive acts may sometimes be referred to the principle which understands shows that, in such cases, the principle of the two kinds of acts, the sensitive and the intellective, is one, and that this single principle is the one human soul, so that all that lies outside of this one principle does not go to constitute that soul.

3.° We have granted that the sensitive principle, considered in itself, is different from the intellective principle; but we have said that these two principles are capable of uniting into one, if not in the way in which two mathematical points, moving and uniting, become a single point, at least in that in which the beginning of one straight line which is added to another straight running in the same direction, is not doubled, but remains a single principle at which the whole line thus produced begins.

641. 4.° We have said that the basis of this union between the intellective and the sensitive principles is the *fundamental perception of the animal feeling*, and that this perception is an act of the intellective principle which

through it acquires the name of *rational*. And, indeed, granted this perception, it follows that the intellective principle itself becomes at the same time sensitive, although it feels in another and higher manner than that in which the merely sensitive principle feels. Indeed, the intellective principle perceives the substantial feeling (term and principle) under the form of being, as a mode, an act, of being (for even the substantial feeling is a special actuality of universal being). Now it could not perceive feeling as being, if it did not perceive it as feeling; hence what it perceives is *feeling-being*. On the contrary, the sensitive principle has for its term the felt, as felt, and not as being, or even as feeling (principle and term). Now, the sensitive principle, which forms an identity with the intellective principle, is just this, that is, it is the very intellective principle, which, perceiving *feeling-being*, feels the term of it, the felt, with a feeling included in being, which is its own proper object. On the contrary, the sensitive principle, inasmuch as it only adheres to the extended term and produces feeling, and, consequently, does not perceive either being or itself, does not identify itself with the human soul, and is not the human soul. And it is to this latter principle that we must attribute those movements which take place in man without the concurrence of the intellective principle or against its will.

642. 5.° Thus the merely sensitive principle does not lose its activity, because the union takes place through permanent intellective perception, which does not alter the nature of the thing perceived, although it may act on the thing perceived and even dominate it. Hence it is that feeling is at once the term of the merely sensitive principle, and of the intellective—sensitive or rational principle.

In this way we are able to explain how two powers, the power of the merely sensitive principle and the power of the perceptive or rational principle, act at once on the same, identical felt, and how these two powers sometimes come into conflict.

We are thus also able to explain how the *sensitive principle* and the *perceptive* or rational *principle* may influence each other. For, if the merely sensitive principle, by its own spontaneity (given the proper stimulus) changes its own felt, it changes also the term of perception, and in this way is able *indirectly* to modify and rouse the act of the rational principle. On the contrary, if the intellective principle wishes to change the felt, which it actually perceives along with the sentient principle, it does so by acting directly on this principle, because, although perception, when it is actual, does not change the nature of the perceived, yet the percipient has the power to act upon it and change it. Thus when I, touching it with my hand, actually perceive an external body, I can change it, being enabled to do so by the actual perception which unites that body to me. This is the reason why man can change his own body which he perceives immediately as felt. Thus, the first, second, and fourth objections are met and answered.

643. 6.° If man sometimes chooses to lose himself in the pleasure of sensation, which is the third objection, I reply that though he does so, and though acts of reflection are thereby suspended, it must not be supposed that the immanent and fundamental perception is lost, and that sensation alone remains. Sensation by itself can never be desired by man, who is the rational principle; on the contrary, perception is strengthened by this giving way to feeling, which is what in perception is comprehended as the object of desire. It is not true, therefore, that the mere sensation is desired, but among rational acts the first, that is, intense perception, is so strongly desired, that it is sought even at the sacrifice of reflex acts.

644. Finally, we may observe that, in perception, the rational principle is properly not *active*, but rather *receptive*, although it possesses and communicates form, so as to be the informing cause.* If, therefore, we consider the fundamental perception alone, we do not discover how the

* *Informing cause* is not equivalent to *active cause*.

rational principle is likewise that which modifies feeling. But if we go further, if we reflect that every actual perception imparts to the rational principle an *active faculty* (corresponding to the receptive faculty of perception), whereby it is enabled to become the cause of modification in the perceived, it will be seen how the activity of the rational principle upon the animal felt (*sensum*) is not so actual and permanent as the fundamental perception itself, how it may act intermittently, and how it is therefore a potency and not an act. And so long as this activity of the rational principle keeps itself in a state of potency, the sensitive principle may act independently of it, and move the animal feeling. Such modifications are all received by the percipient principle in its receptivity, and informed by it, that is, reduced to a rational condition.

645. To these remarks we will add another on Plato's definition of man, as "an intelligence served by organs." Its defect we have already pointed out.* Here we will call attention to the true side of this definition, the side by which it was suggested to the mind of Plato, inasmuch as we always like to repeat that the errors of great men are only great or subtle truths, disguised or imperfect. This definition, then, was found wanting by Aristotle and, after him, by the Schoolmen, because it seemed to unite intelligence to the body as *mover*, and not as *form*. Now, is it altogether erroneous to consider intelligence as the *mover*, instead of the *form*, of the body?†

The answer to this question will certainly depend upon the manner in which we define and determine the nature of intelligence, on the one hand, and that of organic body, on the other; and it is just because these two terms occur in the definition without determination that it is defective.

But if, instead of the generic term, *intelligence*, we put *intelligence perceiving animality*, and if, instead of *organic body* or *organs*, we put *animal*, the definition will be

* *Anthropology*, Bk. I, chap. i; nos. 24-26.

† Aristotle, *De Animâ*, I, 1, sqq.; 406 b 25 sqq.

set right. It will then assume this form: Man is an intelligence naturally perceiving animality and served by the same animality. In this way the relation between such intelligence and such animality might be that of *mover* and *moved*, because the rational form given to animality is already expressed in intelligence, as so determined. Nor does it do any harm though in this definition animality occurs twice, because animality, that is, the substantial animal feeling, has in man really two modes of being: as perceived, it is in the rational principle, and in so far is informed by that principle; while it is in itself as mere feeling, and in so far is moved.

646. Thus man consists of two parts, the one, the essence, the other, the condition, of him. These two parts are not the *body* and the *soul*, but the rational soul and the living body. To these two parts, the words *spirit* and *flesh* in Holy Writ seem to correspond; for in it the word *flesh* does not mean dead flesh, but flesh endowed with life and sense.

We come now to the question of the origin of the intellective soul, so much discussed by the ancient philosophers and by the fathers of the Church, but abandoned by modern philosophers, weary of such lengthy investigations, and distrustful of the possibility of arriving at a solution.

CHAPTER XXIII.

ORIGIN OF THE INTELLECTIVE SOUL.

Καὶ τῶν μὲν θείων αὐτὸς γίνεται δημιουργὸς τῶν δὲ θνητῶν τὴν γένεσιν τοῖς ἑαυτοῦ γεννήμασι δημιουργεῖν προσέταξεν.—Plato, *Tim.*, p. 69.

647. If we had only to explain the generation of a purely sensitive soul, like that of the brutes, the difficulties of the question would be much less. We have already seen that it is multipliable through the division of its felt term (nos. 455-499).

We have also seen that this mode of multiplication does not, in the least, interfere with its simplicity.

But, when we have to deal with an intellective principle, the difficulty is immensely increased.

648. Aristotle even observed this; for, in his work on the *Generation of Animals*, after remarking that the souls of brutes do not come to them from without, and cannot exist without body, because everyone of their operations is performed with the aid of a bodily organ, he adds: "It follows, therefore, that the intellect alone comes from without, and that it alone is divine, seeing that bodily action has nothing in common with its action." *

In fact, all the philosophers of the highest rank have recognised that there is something divine in man, that is, something that can be imparted immediately by God alone. Thus Aristotle himself in another place says: "Man alone among animals partakes of the divine," † and, speaking of the contemplative life, he does not hesitate to affirm that it "exceeds human nature," ‡ meaning that man, in contemplation (θεωρία) goes beyond

* *De Hist. Anim.*, Bk. I, chap. i.
† *De Animal.*, Bk. II, chap. x.
‡ *Ethica*, Bk. X, chap. viii.

human nature and attains to divine things, such as ideas are. Whence he adds that "man does not live in that way through what is man in him, but through that divine something which is in him,"* and again, "As much as this (intellective principle) differs from the compound, so far also its operation differs from that which comes from any other virtue. If the intellect is a divine element with respect to man himself, the life also which proceeds from this is divine with respect to human nature." Hence he teaches that "we must not think too much of mortal things, but as far as possible render ourselves immortal."†

649. For this reason we have said that it is impossible in any way to explain the genesis of man without having recourse to the intervention of God Himself.‡

But what remained to be determined with precision was: What is that divine element which all the greatest thinkers on human nature have seen and confessed? This question must be answered in order that we may not confound with the divine element what does not belong to it.

650. And, indeed, the ancients were content to say that the human mind was divine, and I do not know that they ever expressed themselves more exactly.‖ When, therefore, we undertook to carry out this investigation, we found that in the human mind itself two things must be distinguished, which two things we have called *subject* and *object*. We next saw that the subject could not in any sense be called divine, because limited and contingent, and that only the object could be numbered among divine things, as something truly unlimited, eternal, necessary, and furnished with other purely divine qualities. For the object which stands immovably before the human subject is being itself, in so far as it is ideal.

* *Ethica*, Bk. X, chap. viii.

† *Ibid.*

‡ *Anthropology*, Bk. IV, chap. v; nos. 812-831.

‖ The Alexandrine philosophers seem sometimes to have hit the truth. The Valentinian heretics said that man was generated by λόγος and ζωή. But there remained an ambiguity in the word λόγος, which expressed both the subjective reason, as well as the objective, the idea. Hence neither their concepts nor their expressions were clear, not to speak of the ugly errors which they afterwards added to their doctrine.

651. In consequence of this self-communication of the object to the human subject, we may affirm of this subject alone what St. Augustine affirmed of the nature of the intellective soul, viz., that it is *vicina substantiæ Dei*,* but not that it is divine itself. Yes, as Claudius Mamertus excellently said: "It is similar to God, as the *intellectual* is to the *intelligible*."†

652. The object, therefore, or form of intelligence cannot be generated, but is revealed by God Himself to the soul, which is thus rendered intelligent. This God did for the whole of human nature, when He infused the soul into Adam, in whom human nature was contained, and this had afterwards only to develope itself in individuals through generation.‡ For as, at the beginning, He imposed fixed laws on all created things, so then also He laid down this law that, as often as man should multiply individuals by way of generation, these beings should have *being* present to them, in such a way as to draw and hold their intuition.

653. The new individual on whom being shines must be an organized animal being like its parent. This organization is certainly the most perfect of which the animal is susceptible, that probably in which excitation is greatest, in which the harmony of this highest excitation is perfect, and the central power of the sentient raised to the highest degree, so that the animal subject, having reached the extreme of its perfection, may go beyond the limits of animality and reach eternal things, the idea.

654. It must not be supposed that, between the specific perfecting of this animal organism and the vision of being, any space of time intervenes. In the same instant in which the human animal attains its proper nature, it is also rendered intelligent, because admitted to the vision of being by the natural law established in the beginning by the Creator.

* To *Psalm* cxlv.

† *Similis (Deo) quantum intellectualis lux luci intelligibili; dissimilis quantum mutabilis creatura immutabili Creatori dissimilis* (*De Statu Animæ*, Bk. I, chap. v) He gives to the soul the title of intellectual light, in so far as it is intelligible.

‡ *Anthropology*, Bk. IV, chap. v; nos. 812-831.

655. Nor must we suppose that the special organism of man, after it is formed, can ever be found without the intellective principle. No, because this intellective principle, as soon as it is united to the body, gives it the final formation and modification, which thus renders it entirely man's property, and it continues to exercise the same activity, influence, and dominion on the body in the way in which we have said that the acts of the rational soul operate on the body and give it a certain actuality which it could not have before. Thus there is an organism altogether belonging to the formed man, an organism which could not exist without the intellective soul, because this soul, in informing it, gives it the final act. Animality and its organism must, therefore, have reached their highest perfection before the intellective or rational soul can unite with them; but, in uniting with them, this soul imparts to this organism that kind of completion, that actuality, that character of movement, that litheness of impulse, that life, which cannot exist in any merely animal being.

656. After this, there is nothing to prevent the subject in question from multiplying through generation, since the subject, as subject (apart from the object), is merely an animating being.

But whence, it will be asked, does this animal principle derive that virtue which enables it to intuite *being?* I reply that it is created for it by *being* itself in the act of union, because inasmuch as being is intelligible in its essence, it cannot unite itself to any subject without thereby being understood, for the reason that, in its case, to be united means to be understood. It, therefore, possesses this virtue that it creates intelligences. And what logical reason is there why a sentient principle should not, to use Aristotle's phrase, be potentially [δυνάμει] intelligent, that is, why it should not be raised to an intelligent condition? That principle is simple: it is not body, for body is only its term. If another term is given to it, its activity necessarily widens. It must, there-

fore, be conceived as a capacity which receives, as a remote power drawn to a new act. The principle which at first received an extended term now receives also an unextended term of a higher nature. But if this second term cannot confound itself with the first, or be modified by it, if, in a word, it is an *essentially* cognizable object, the effect of it will be that this principle will have become intellective. It has, indeed, lost its identity as principle, it has been actuated into another principle; but this change of nature, of course, has nothing absurd in it.

657. Hence, just as St. Thomas said that the sensitive soul is an act of the body (and this is true if by *act* we mean the *principle* of which the body is the term), so we may say that intelligence is an act which, in respect to its origin, issues from the sensitive soul; and the same thing is true, provided we add that this act constitutes a subject independent of the body and independent of the sensitive principle itself, because it is sustained by a new term which does not perish.

658. After this a difficulty vanishes, which otherwise might be raised. It might be said: In man there is but one rational soul. But man is also an animal, and, as such, has a sensitive principle. It is the nature of the animal and of the sensitive principle to multiply through generation. This law which holds universally for animals cannot be abrogated in favour of man. And, indeed, man generates. If, therefore, he generates and thus multiplies the animal individual, he must also multiply the rational soul, which in him is one and identical with the sensitive soul. We say that this is precisely true, but only when we presuppose the primal law, whereby it was decreed that universal being should unite with all the individuals having human nature, a law established by God when He breathed into Adam the breath of life.

659. Indeed, the fathers of the Church unanimously attribute the origin of human souls to that first act. "Man," says St. Athanasius generally, "received his soul from the Divine breath, and, therefore, he knows Divine

things, pursues heavenly things, understands heavenly things, and is rational and furnished with mind."*

This likewise confirms the opinion of Athenagoras: "Soul does not generate soul and so claim the title of parent; but man generates man."†

* *De Quæst.* c. v *de Animâ.*

† *De Resurrectione Mortuum.* Singular is the way in which Prudentius expresses himself concerning the origin of the human soul:

"*Non animas animæ pariunt, sed* LEGE LATENTI
Fundit opus Natura suum, quo parvula anhelent
Vascula, vitalisque ADSIT SCINTILLA *coactis.*"

Apotheosis contra Ebionitas.

BOOK V.

ON THE IMMORTALITY OF THE HUMAN SOUL AND THE DEATH OF MAN.

660. Much patient labour had to be expended on the preceding book on account of the difficulty of all questions relating to the simplicity of the soul. This is one of those truths which are easily confirmed by many direct and irrefragable arguments, as we have seen, but which, nevertheless, leave behind them, deposited as germs in the mind, not a few dark and mysterious problems to be solved. These germs, although already fecundated, remain, as it were, inclosed in very hard shells, which do not open, unless the mind itself, with long and generous love, warms and hatches them. Though somewhat suspicious at first about the result, it afterwards rejoices, when its young come forth full of life, and it sees and recognises them distinctly as the lawful offspring of truth. The reader of the present book will have all the more reason to rejoice in the labour which he has undergone and in that which still awaits him, that now his intellect is properly prepared and disposed to rise to the contemplation of that most noble truth with which the present book purposes to deal, that is, the immortality of the intellective soul, which is the condition of human dignity and of the happiness to which man, with irresistible and indomitable longing, continually aspires. For, though mortal in his own nature, man desires immortality, and eagerly seeks the certainty of it, and nothing so much disturbs him

as the bare doubt or suspicion that he may be deprived of this great good. Now, although reason and experience show him that his body is corruptible and destined to dissolution, and only the revelation which he has from God Himself can promise him with certainty that even his body shall one day be restored to him, no longer subject to death, still he takes the utmost pleasure in, and sets the highest value on, that truth which philosophy can impart to him, the truth, namely, that the better part of him, that is, his intellective soul is, in its own nature immortal and imperishable. This truth must likewise be to him a glad presage and earnest of what he may expect from the munificence of his Creator. We shall now, therefore, begin to treat of this question, as a kindly, generous fruit which we have cultivated and brought to maturity through the labour of the foregoing investigations.

CHAPTER I.

ON THE CONCEPT OF DEATH, AND THAT OF ANNIHILATION.

661. But, before rising to the subject of immortality, we must first descend and consider death, which is bound up with the principle of life, that is, with generation, which we treated of toward the end of the preceding book. And, as clearness of concepts is the basis of all clear reasoning, we must begin by recalling to mind the concept which we have already formed of death, as the cessation of animation in the body. According to this concept, death cannot, in any way, be conceived as a passion of the soul, but only of the body. Thus we have already proved that souls do not in any way cease through death, whether they be merely sensitive or likewise intellective (nos. 134-139, 602-605).

662. But it remains to be considered whether souls could naturally cease to exist in any other way, and so annihilate themselves, or be annihilated by any change taking place in Nature, in virtue of the agents constituting it, or through the positive act of the Creator Himself. Let us treat this question, first with relation to sensitive souls, and afterwards with relation to intellective and rational souls.

CHAPTER II.

CAN SENSITIVE SOULS CEASE TO EXIST?

ARTICLE I.

Sensitive Souls cannot cease to exist through any Action of the Natural Forces.

663. What we have said above with regard to the nature of sensitive souls leads us to distinguish two kinds of them, (1) those which may be called *elementary souls*, having as their term the elementary continuous, and (2) organic souls, having as their term the organized continuous, agitated by internal and continuous movements which excite them. These second souls grow out of the first; they are diverse actuations and individuations different from the first. But the first have all that is required to make them souls in the true sense of that term, because they have (1) a sentient principle, in which the essence of soul consists, and (2) an extended term which forms the essential condition of the same soul. Whence the question: Are souls annihilated? put generally, relates merely to elementary souls, because the mere fact that organic souls resolve themselves into elementary ones through the dissolution of the organized body, does not put an end to the existence of souls, but only transforms them. Our view, therefore, takes a middle ground between that which maintains that the souls of beasts are annihilated and that which pronounces them immortal.

664. Now, that elementary souls cannot be annihilated by natural agents, seems to me demonstrable by several arguments, two of which are the following:

I. If sensitive souls, that is, sentient principles could

be separated from the continuous, it is certain that they would be annihilated, because their essential condition and relation would be wanting. But what we have said of the nature of matter, which cannot be conceived to exist except as the term of a sentient principle, shows that, in such a case, matter also would be annihilated along with it (*Anthropology*, Bk. II., sec. i, chap. x, sqq; nos. 247 sqq). Now it is admitted by all, that matter, though it may undergo different affections [πάθη], cannot be annihilated by any of the active causes of nature; hence, neither can the sensitive principles which are their essential correlates.

II. The union of the sentient principle with its term is immediate. There does not enter into the concept of this union any natural agent, as a mediator affecting or aiding the union. It takes place, therefore, through the reciprocal actions and passions of the unextended sentient principle and the extended felt term. Now, if every other agent is foreign to this union, then nothing can act upon it, nothing can undo it. It follows that the knot in question cannot be untied except through the action of the sensitive principle itself or of that which can act upon it, or else through the action of matter itself or what can act upon it. But the sensitive principle and matter, being joined together, cannot of their own accord separate, because no being annihilates itself. This union is natural to them, and their natural activity is directed to actuating and maintaining it. There is no other activity in them. It follows that, if disunion is possible, it must be due to the immediate action of some foreign being either upon the sensitive principle or upon matter. But no such action is possible in either case. It is not possible that an agent acting on the sensitive principle should disunite them, because nothing acts upon the sensitive principle except the intellective principle. Now, the intellective principle has no other power over the sensitive but that of moving it to its acts (nos. 291-305). But, among the acts of the sensitive principle, there is not that of destroying itself or sundering itself from matter. Hence in this way disunion

cannot arise. But neither can it arise in the other. Nothing acts on matter immediately (apart from the sensitive principle), except matter itself. But material forces applied to matter have no other power than that of dividing it or uniting it by means of motion. Now the mere division or union of its parts has no influence upon the union which it has with the sensitive principle. There does not, therefore, exist in Nature any agent that can make elementary souls cease to exist.

May they then be destroyed by an immediate action of the Creator?

ARTICLE II.

Sensitive Souls are not Destroyed by the Creator.

665. Natural Theology contains this proposition (confirmed by Revelation) that "Nothing is annihilated of all that God has created." And, indeed, it is repugnant to reason that the Creator should annihilate His own work, since, just because it is His, it is respected and loved by Him, through the esteem and love which He bears to Himself.

Sensitive souls, therefore, do not perish in any way.

ARTICLE III.

The Existence of Elementary Life Confirmed.

666. And here let us observe that the hypothesis of life being annexed to the prime elements of bodies, receives fresh confirmation; for, if life were separable from bodies it would perish, and this would contradict the thesis that nothing is annihilated of all that came into existence from the hand of the Creator.

On the contrary, if it is true that every material element has essentially united to it a sentient principle, and that, when several such elements unite in virtue of the continuous and other laws, some of which we have set forth, several sentient principles unite in one, it follows

that the created feeling never perishes, and that, when bodies are decomposed or recomposed, it is only modified continually in a thousand ways and assumes a thousand different forms. These changes, being foreseen and provided for by the most wise Providence, must be continually directed toward the reducing of the spirit of life, which animates the world, to a better and better state and condition, to a higher and higher perfection.

667. Further, as the thesis: Nothing goes out of existence, corroborates the hypothesis of the animation of the elements of matter, so this hypothesis derives new probability from the theory of the generation of the animal. For, if it is true that the animal *multiplies* through the division of the felt continuous according to certain laws, it is manifestly true, on the other hand, that life *simplifies* itself when several *continua* unite according to certain laws. This is the converse operation to generation. If the one be admitted the other cannot be rejected.

CHAPTER III.

ORIGIN AND REFUTATION OF METEMPSYCHOSIS.

668. Hence, the death of the animal, that is of the animate organism, is not the destruction of feeling, but merely a modification of it: it is merely the dissolution of the *individual* or of the *organic soul*, in other words, of "that harmonious feeling of continually reproduced excitation, having a dominant centre of activity, manifested extra-subjectively by an organism."

And here it may be well to consider the origin of the doctrine of *metempsychosis*. It must, it seems, in great part, be attributed to the fact that the earliest philosophers were not able to distinguish the intellective and sensitive principles, and that they regarded man as the most perfect animal, nothing more. Believing in spontaneous generation, and observing many other similar facts in nature, they drew the conclusion that all corruption was generation, and that, when an animal dissolved, others were formed out of its elements. This looked like a kind of transmigration of souls. Hermias, a Father of the Church in the second century, in a pleasant little work which he wrote, twitting the gentile philosophers with their uncertainties and contradictions, touches upon the doctrines professed by them in regard to the fate of the human soul, in these terms: "Now I am immortal, and I rejoice; now I am mortal, and I weep. When I am dissolved into particular bodies, I change into water, air, fire: in a brief space, I am no longer either air or fire; but I am turned into a wild beast or a fish. Whence, in my turn, I have dolphins for my brethren; but if I look at myself, I am terrified at the sight of my body, and do not know by what name to call

myself—man, dog, wolf, bull, bird, serpent, dragon or chimæra.* For by these seekers after wisdom I am changed into all kinds of animals—terrestrial, aquatic, winged, multiform, wild, tame, mute, vocal, irrational, rational. I swim, I fly, I cleave the upper air, I crawl upon the ground, I run, I sit. And here comes Empedocles and makes me a shrub!"†

669. The error of these philosophers was twofold:

1.° They spoke of man, as if he had only a sensitive soul, as if he were merely an animal.

2.° Many of them were not aware that the individuality of feeling ceases with the death of the animal, and that what remains is the feeling of the surviving *continua*, although Heraclitus the Dark (σκοτεινός) seems to have had a glimpse of the truth, when he assumed the existence of a common and universal soul in which all particular souls merged themselves, and the Stoics, who borrowed from him, afterwards said the same.‡ But these again fell into error, when they made out that there was but one soul, instead of as many as there are *continua*, from which they passed to the other error with reference to the soul of the world, and to that third error, incomparably the greatest of all, of declaring that that soul was God Himself.

* This was observed even by Aristotle, *Physica*, IV. And St. Thomas says: "*Antiqui autem, ignorantes vim intelligendi et non distinguentes inter sensum et intellectum, nihil esse existimaverunt in mundo, nisi quod sensu et imaginatione apprehendi potest. Et quia sub imaginatione non cadit nisi corpus, existimaverunt quod nullum ens esset, nisi corpus, ut Philosophus dicit. Et ex his processit Sadduceorum error, dicentium non esse spiritum.*" *Sum. Theol.*, Pt. I, quæst. L, art. i.

† Hermiæ Philosophi *Gentilium Philosophorum Irrisio*, S. I. 9, L. i.

[‡ Rosmini here refers to Aristotle, *De Animâ*, Bk. I, c. i; but I can find nothing there on the point in question. The fragments of Heraclitus that best bear out his assertion are: Κόσμον τόνδε τὸν αὐτὸν ἁπάντων οὔτε τις θεῶν οὔτε ἀνθρώπων ἐποίησε, ἀλλ' ἦν ἀεὶ καὶ ἔστι καὶ ἔσται πῦρ ἀείζωον ἁπτόμενον μέτρα καὶ ἀποσβεννύμενον μέτρα: and Πυρὸς ἀνταμείβεται πάντα καὶ πῦρ ἁπάντων, ὥσπερ χρυσοῦ χρήματα καὶ χρημάτων χρυσός. Bywater, *Heracl. Ephes. Frag.*, xx, xxii.—*Trans.*]

CHAPTER IV.

CONCEPT OF THE DEATH OF MAN.

ARTICLE I.

The Death of Man consists in the Cessation of the Primitive Perception of the Fundamental Feeling.

670. Having, then, excluded these errors and seen wherein the death of the animal consists, let us ask wherein consists the death of man?

Common sense replies that it consists in the separation of the soul from the body, and most correctly. But wherein does this separation consist? Having seen wherein the union of the rational soul with the body consists, we are ready to understand also their disunion. Knowing the knot that forms human life, we know how it is untied, and how life ceases.

The bond between the intellective soul and the body consists, according to the view already expressed, lies in a natural and immanent intellective perception of the fundamental feeling, and, consequently, of the body. When this perception ceases, the human soul is loosed from the body; the human body is dead; the man is dissolved.

ARTICLE II.

Under what Conditions does the primitive Perception, and, consequently, Human Life, arise?

671. But, in order to clear up this truth still further, let us sum up the facts relating to the composition of man and its conditions.

1.° There is a subject to whose act two terms are given, the extended felt and intelligible being. In as far as this subject has for the term of its act the felt extended, in so far it is called a sensitive, animal principle: in as far as it has for its term *intelligible being*, in so far it is an *intellective principle.*

2.° The intellective principle, having *being* for its term, has consequently for its object every entity comprehended in universal being. Hence, it has for one of its objects feeling under the relation of *entity*, and, in so far as the *intellective principle* has for its object feeling as entity, in so far it is called rational principle, or *rational soul.* But in feeling there are the sentient animal principle and the felt, that is, the body. Thus, in the first perception of the fundamental feeling there is the perception of body,* or the union of the intellective soul with the body and, at the same time, with the proximate animating principle of it.

3.° But what is the condition under which the subject, besides being animal, becomes intelligent? We have said that, in order to this, the animal feeling must acquire its highest specific perfection, the highest unity and harmony, by means of a perfectly suitable organization. To determine this unity and this harmony requires a profound investigation, which we do not at present intend to undertake, and for which we do not think ourselves competent.

* We have already remarked that this first *perception* is a perception of the first degree, or simple apprehension, without explicit or actual affirmation (nos. 268-271). The actual affirmation is an operation which takes place much later, when the rational soul observes that the body is a being in itself distinct from the sentient principle. Then the affirmation does not add *cognition*, but confirms the preceding apprehension, and this confirmation is not anything objective that is added, but a new disposition which the subject assumes with respect to the known. In order, then to complete perception by raising it to its highest degree, nothing more is required than an activity of the subject, producing in it the actual state of *persuasion.*

CHAPTER V.

HOW HUMAN NATURE IS CONSTITUTED.

672. Instead of this, let us ask: Why is the intuition of being given only to a subject whose animality has such perfection of feeling, and, therefore, of organization?

If we should content ourselves with answering that such was the will of the Creator, we should be saying something that was very true and just; but this would not help us to a solution of the question which really means: Had the Creator any ground of natural necessity, or, at least, of fitness, for so decreeing?

673. And as to fitness, we can readily see that it was most fitting to the dignity of ideal being that it should manifest itself to a perfect animal subject, and not to an imperfect one. We see that, since this law runs through all nature, that imperfect things are brought to perfection by successive degrees,* it was fitting that corporeal feeling should be allowed to ascend that graduated scale of perfection peculiar to it, and that only when it reached the last grade, to which it is raised by a very perfect organization, and when the sentient principle could not any further perfect itself, there should follow a new perfection, issuing from the subject itself and reaching out to the object, which raises it to the condition of an intelligent being.

674. But we should find it a more difficult undertaking, if we should attempt to prove that this was due to a necessity of nature, in other words, that considering the nature of the sensitive principle and of the idea, we were

* Of the wisdom of this law we have spoken in the *Theodicy*, Bk. III, chap. xx, xxi; nos. 603-607.

compelled to admit that this principle could not intuite the idea except on condition of having acquired the highest specific organization, or, what is more, that, when it had attained this organization, the idea of being must necessarily be revealed and manifested to it. On both points we may form tolerable conjectures, such as the following:

That an animal principle cannot, except when joined to the highest power of animality, intuite the idea, may be conjectured, if we suppose that every virtue of the sensitive principle, when not joined to the highest specific power, is spent and absorbed in the tendency to acquire the state of organic perfection which it lacks, and that, therefore, it cannot rise to behold ideal being, which is in itself essentially intelligible and everywhere present (if it is not intuited, this is due to the defect of the subject, which has not the power to turn to it). In fact, if we suppose that the virtue of a sensitive principle is all exhausted in organizing matter, there remains nothing more of it, whereby it can actualize itself toward being. But, after the specific perfection of the organism and of feeling is fully realized, the principle no longer uses that virtue and force which it employed in laboriously improving its organization, and it then finds being present everywhere, as I said, and, taking it for the term of its act, renders itself intelligible. To repeat what we said before, the truth is that being is everywhere, and everywhere it is intelligible, not being able to be otherwise. Such is its very essence. Hence, if we assume that there is a universally sensitive virtue [δύναμις], that is, a subject capable of feeling everything that is presented to it, it will follow that this virtue will feel being, which never fails, on the simple condition that it is not occupied or exhausted in anything else, and in merely feeling it, it will be rendered intelligent. The reason of this is that the nature of the sentient principle is determined by the felt, and such is the nature of being that, when felt, it renders the sentient intelligent, for the simple reason that it is the

very intelligibility of being, and cannot be mixed up with anything else, being in its essence objective. In order to understand this fact, we must, therefore, suppose that the sensitive virtue or principle, which we call subject, may terminate its act in anything present to it, but that this virtue, being limited, is sometimes arrested in its act for want of force to continue, and sometimes is able to go on till it feels intelligible being.

675. This thought will be better understood, if, instead of considering the power of the sentient subject, which tends to increase as much as possible and, having the highest grade, finds a force sufficient to impel its act beyond matter, we consider the nexus between *body* and *being*. The fact is, that *body*, the term of the act of the sentient principle, has different grades of being and is apprehended by the sentient principle in these its different grades successively.

In the first grade, it is a *sensible extended*, and, so long as the sentient principle apprehends the body only as a *sensible* extended, or, as we have said, in the relation of sensility, such apprehension renders the principle sentient only, not intelligent.

In the second grade, the sensible extended, which we term body, is a *being*, and as soon as the sentient principle apprehends the body as being, it is already rendered intelligent and rational. And, indeed, what is the meaning of apprehending the body as being? It means simply to apprehend the body as a certain determined and limited realization of being, as a certain term of the act of being.* If, therefore, we suppose that there is, in the sensitive principle, a first tendency to apprehend the body to the highest possible degree, the result will be that, when it has apprehended the body, or the felt extended, in its greatest

* We say that the *real* (as we think it) is the term of an act of the *ideal essence*; according to the principle laid down by St. Thomas, that "*Omne participatum comparatur ad participans ut actus ejus*" (*Sum. Theol.*, Pt. I, quæst. lxxv, art. v, ad 5). For *subsistence* is a participation of the *essence*, and, hence, is called an act of it; but it might, with greater propriety, be called a term of its act. See *New Essay*, vol. iii, nos. 1234-6.

perfection, it will tend to apprehend it still better in its entirety, and, in virtue of this instinct, it will be led to apprehend it in universal being, since universal being is what *forms* body-being. The fact is that body-being is an object, whose principle is ideal being itself, which is called also initial being, and whose term is the extended sensible. The tendency, therefore, to apprehend body will lead the sentient principle to apprehend it as being, and thus it will be led from the extended sensible to its essence, which belongs to universal being and, consequently, will be led to see universal being itself. In this way it seems possible to explain the transition which the sensitive principle makes from the order of mere sensitivity to the order of intelligence, as a transition from a less perfect to a more perfect state.*

It is, therefore, through the need which the sensitive principle feels of becoming rational that it becomes intellective; it is a need which it feels to perfect itself with relation to the apprehension of its own proper term (the body) that impels it toward ideal being, which in its nature is intimately united to every sensible reality. Through such union every sensible reality becomes a being, that is, an object.

The sentient principle cannot, therefore, apprehend the body in its highest grade of essence, without impelling its virtue beyond the body to another, ampler term, in which the body is contained and rendered intelligible, and this term in which the body exists with its essence is universal being.

* By means of this principle, St. Clement proves, against the Platonists, that the human soul is not sent from heaven, because, if it were, God would be making it pass from a more perfect to a less perfect state, which is not fitting. "Non huc decælis anima ad ea quæ sunt deteriora demittitur. *Deus autem fecit omnia ad ea quæ sunt meliora*" (*Strom.* L. iv, c. xxvi).

CHAPTER VI.

THE INTELLECTIVE SOUL NEVER LOSES ITS INDIVIDUALITY, BUT IS IMMORTAL.

676. Now, though it is true that *universal being* contains the essence of body, it is not equally true that body contains universal being, for the reason that the greater contains the less, and not *vice versa*. The sentient principle, therefore, through this progress, acquired a new term to its activity, a term superior to the body, independent of the body, a term that exists *per se*, and is ideality itself.

677. But the term of the active principle is what determines its nature. Therefore, the sentient principle, in acquiring a new term, changed its nature and acquired one infinitely more noble. It attained a perfect and divine form.

678. We must, therefore, remember that it is an ontological law that every being, by the same virtue whereby it is, tends to preserve and perfect itself, and, therefore, no being has any virtue directed to its own destruction. This law is proved in ontology. Here we must accept it on trust. If, then, no being, no nature, destroys itself, all destruction of beings comes from without, from some foreign activity.

Moreover, every complete being is a simple principle, having its natural and immanent term. If the principle has its term, it is; if this term is taken from it, it ceases, because the natural and immanent term is the condition of the first act, whereby the principle is, according to the known law of synthesis. This principle, stript of all its terms, remains a mere abstraction, a mere capacity, a

being like the *materia prima* [πρώτη ὕλη] of the ancients, supposed to be void of all form. There remains, therefore, only the creative power of God, which is not a determinate external being. Hence the destruction of a contingent being happens only when the term in which its first act terminates is destroyed.

679. Now what is the term of the being man? We have seen that he has two terms, the body and universal being. Now, what foreign being could destroy these two terms of the being man? The foreign beings are God and contingent things. As to God, we have already assumed that He annihilates nothing that He has created; therefore, the destruction of man cannot come from God. But what can the activities belonging to contingent things do to destroy man? What can they do to destroy the two terms of the act whereby man is? The body of man, which is one of the terms, is a complex of elements organized in the most perfect specific manner, and thereby individuated. Now, the forces of nature can dissolve this organization, and, along with it, destroy the animal feeling peculiar to man. But on universal being all the forces of nature play in vain; because universal being is impassible, immutable, eternal, beyond the reach of the activity of any finite being. For this reason that virtue whereby man intuites universal being cannot perish. But this virtue, this first act, is the intellective soul; therefore the intellective soul cannot cease to exist in its own proper individuality, inasmuch as it has its own reality which individuates it,* a fact which is commonly expressed by saying that it is immortal.

680. The intellective soul of man, therefore, in as far as its origin is concerned, sprang from the bosom of the sensitive soul, and was a virtue of it; but this virtue became a principal act and acquired immortality, as soon as it reached universal being, because this being is altogether imperishable and unmodifiable—an eternal thing.

* We have shown in the *Anthropology* that reality is the principle of individuation. Bk. IV, nos. 764 sqq..

CHAPTER VII.

WHAT IS THE FIRST THING UNDERSTOOD BY MAN?

681. From the theory set forth above we may derive this corollary, that an interpretation, rendering it true, may be given to the opinion of the Schoolmen, which St. Thomas expresses thus: "PRIMUM *autem quod intelligitur a nobis secundum statum præsentis vitæ est* QUIDDITAS REI MATERIALIS, *quæ est nostri intellectus objectum.*"

It follows, indeed, from what has been said, that the sentient principle, having once arrived at perfection, tends to know the nature of body (*quiddítas rei materialis*), that is, to perceive body *as being;* hence the first *real object* of intelligence is body.

682. It may be said that, according to us, it is not the body, but the animal feeling that is the object apprehended by the first fundamental perception. This is true; still, if we consider that the sentient principle is not divisible from the felt, and that it is, therefore, perceived in and with the felt, it follows that the felt body, the living body, is really the term of perception.

683. It may also be said that St. Thomas speaks of the extra-subjective body, perceived with the five special senses. I reply that I do not pretend that the theory which I am expounding is exactly that of St. Thomas; but the two views approximate each other. And it must be observed also that our theory furnishes the reason why, as soon as an external body acts on our organs of sense, we perceive it intellectually, as if by an instinct. This reason lies in the first immanent perception, since, if the rational principle naturally perceives the fundamental animal feeling, it must likewise perceive the modifications

of it and the action of a foreign force falling within it. For this reason we say that the scholastic proposition receives from our theory an interpretation which renders it true.

684. Finally, it may be said that the first thing understood by us is not body, but intelligible being, whereby we understand body. To this we reply that, if we go to the bottom of St. Thomas' doctrine, we shall find that he teaches the same thing. For, just as we say that we perceive body *through the idea of being*, so St. Thomas, following St. Augustine, says that man perceives body *through the light of the first truth.** In fact, St. Thomas himself does not fail to make the objections. "That *in which* we know all other things, and by which we judge other things, is known first, as *the light* of the eye, and the first principles of the intellect. But we know all things *in the light of the first truth*, and by it we judge all things, as St. Augustine says."†

Now, what reply does the Angelic Doctor give? Does he deny that we know things in the light of truth? Of course not: he admits it fully. "In the light of the first truth," he says, "we understand and judge all things, in so far as *the very light* of our intellects is a certain impression of the first truth.‡ But this light of our intellects is not related to them as that which is understood, but as that *by which they understand*,"‖ in one word, as the means of knowing. And we have only gone further and shown what this *universal means of knowing* is, that is, we have shown that it is nothing other than *universal being*. Such was the purpose of the *New Essay*, in which we undertook to say clearly what the ancients had said darkly. Let us remember then that St. Thomas admits that the light of eternal truth is the principle *quo intelligitur*, and also that "*Illud in quo omnia cognoscuntur est* PRIMO COGNITUM *a nobis*.". Hence, when he says that the quiddity of body is

* *Sum. Theol.*, Pt. I, q. lxxxviii, art. iii; q. lxxxiv, art. vii; q. lxxxv, art. i; and q. lxxxvii, art. ii *ad* 2.

† *De Vera Religione*, chap. iii.

‡ He had already proved this in *Sum. Theol.*, Pt. I, q. xii, art. ii.

‖ *Sum. Theol.*, Pt. I, q. lxxxviii, art. iii.

the first thing understood, he is speaking of another mode of knowing, different from the first, according to which the first known is the light of the intellect, or being. What have we done? We have designated by special terms these two modes of knowing, calling the one *intuition*, the other *perception*, and we have said that universal being is the first known by intuition, and the body the first known by perception. Thus we have reconciled St. Thomas with

CHAPTER VIII.

WHY DOES THE HUMAN SOUL NO LONGER PERCEIVE THE BODY WHEN ITS ORGANISM IS DISSOLVED?

685. Let us now recapitulate all that we have already said with reference to the death of man.

1.° The soul apprehends the body first as sensible, then as being, and in this apprehension of the body as being, it intuites being, and in it the *felt body*. The virtue of the soul, thus rising to the highest degree of activity, does not lose the steps which it has previously taken, and so, while it intuites universal being, it continues to perceive the body as sensible and hence to perceive it as a being in body [*ens in esse*, ὄν τι ἐν τῷ εἶναι].

2.° The highest act of the soul, viz., the intellect, dominates all the inferior acts and, hence, becomes the substance of the soul, because the substance of a being is that first act to which, so to speak, all other acts are appended, the act which dominates the others, which others thus are through it and in it (no. 52).

3.° In the generation of man it appears that, in the beginning, the act of the sentient principle does not contain the ultimate act, which carries it forward to being and renders it intellective and rational. Such, at least, was the opinion of the ancients and of St. Thomas. Hence, in the order of generation, the sentient act seems prior in time to the intelligent act; but, when man has reached his full nature, this, which was the last, is the first in the being, that is, it is that which bears rule in the being and on which all the other acts depend. For this reason it acquires the nature of substance.

4.° The soul, in so far as it is sensitive, feels the body;

but in so far as it is intellective, it perceives the felt body; in this way the union of the intellective soul and the felt body takes place by means of an immanent, natural perception.

5.° In the death of man the intellective soul ceases to perceive the felt body, but it does not cease to intuite universal being, which renders it intellective, and hence it remains without body. For this reason it is said that the separation of the soul from the body is the death of man.

6.° In other words, that which, in the order of generation, was the first act of the soul, but which afterwards became a subordinate act, ceases with the death of man. On the contrary, the act which, according to the order of generation, was the last to be constituted, but which became the first by nature [πρῶτον φύσει], and acquired the character of substance, subject, person, remains.

686. Hence, in the death of man, the principle remains identical; but, losing a term, it undergoes a change of nature, a substantial, not a personal, change (nos. 190-195). The identity of such a principle consists in the preservation of the intellective substance and, hence, of the same subject and the same person.

687. But why, it will be asked, does the soul of man no longer perceive the body when the latter is dissolved?

For the reasons already stated. We have considered the soul of man as united to the body in its three special acts, (1) in the act whereby it feels the body, (2) in the act wherein it intuites universal being, (3) in the act whereby it sees the body in this universal being, that is, perceives the body as a being.

Now these last two acts have certain conditions under which they begin, and certain conditions under which they subsist.

The condition under which the soul passes from the act wherein it feels the body as sensible to the act wherein it feels the body as being and, hence, first intuites being, is, that the corporeal feeling shall have reached its highest

degree of perfection. Now, when the organization is dissolved, the perfect human feeling is broken up into many imperfect feelings, not one of which can have a principle capable of intuiting being. Therefore, in these new principles that spring from the destruction of the human body, the aptitude for seeing being is lost. Hence, not one of them is the human soul: they have lost identity with this soul. On the contrary, the act which intuites being, when it is once accomplished, no longer requires the animal feeling, in order to subsist, because it is altogether independent of that feeling: and this is the human soul, which before was identical with the sensitive principle.

688. Just, then, as two or more sensitive principles can unite into one, so a given sensitive principle can unite and identify itself with the principle of the intellective act. But, just as a sensitive principle may multiply itself, so it may separate itself from the intellective principle, and then it loses its identity and is no longer a human principle. The human principle remains the principle of that act which intuites being, because, wherever there is an act, there is a principle, and where there is a principle, there is a subject, a substance. Such is the separate soul.

689. We must distinctly understand, however, in what sense we speak of the identification of the sensitive with the intellective principle. We do not mean that the two are confounded. It is rational perception that in a certain way identifies them, because in perception the percipient and the perceived become one thing without the two elements being confounded. Now, perception presupposes that there exists before it that which is to be perceived, and this, in the present case, is feeling. It, therefore, perceives *feeling* under the relation of entity. It seems, accordingly, as if the rational principle were that which felt, although it is not the proximate principle of feeling.

In fact, the essence of the human soul is to be intelligent and to perceive the body, only when a sentient prin-

ciple of body identifies itself with it and becomes one of its faculties. Simple feeling is not a human, but an animal, act; man, as such, does not feel until he knows in some way that he feels; and he does not know that he feels until he apprehends the body as a being, apprehends the essence of the body. It is this apprehension that is the act of the rational soul, which is his soul.*

* For this reason, St. Gregory of Nyssa most correctly distinguishes the principle of sensitive life from the soul of man, because this principle is not the soul of man, except in so far as it is apprehended and perceived rationally by it. "Cum ea demum perfecta sit anima, quæ et *intelligentiæ* et *rationis* est vi prædita; quicquid scilicet tale non est, ei cum anima quidem nomen esse commune potest, reipsa vero *non anima*, sed *vivendi facultas quædam* erit, quæ more hominum animæ appellatione censeatur." *(De hominis opificio*, c. xv.)

CHAPTER IX.

WHY DOES THE HUMAN SOUL UNITE ITSELF TO ONE BODY, AND TO ONE RATHER THAN TO ANOTHER.

690. If we remember that the intellective principle is free from the laws of space, it seems to contain no reason which should determine it to unite itself to one body rather than to another, or to one rather than to many.

But the sufficient reason which determines the intellective principle to unite with one body rather than to another, is found in the manner in which we have shown the rational principle to be formed. As we have seen, it was at first a sensitive animal subject, which went on perfecting itself until it attained universal being.

Now the animal subject is determined by the continuous which is its *felt*, and, hence, is bound to space and to a determinate space. Moreover, it is a law of the animal subject that it cannot terminate in several separate *continua*, the truth being that when there are several *continua*, the subjects or sensitive principles multiply correspondingly. When, therefore, the intellective act, whereby the intellective soul exists within the individuated corporeal feeling, arises, it remains, in its formation, bound to the same laws as those of the sensitive principle which was its root. It cannot, therefore, perceive, that is, inform another animal feeling or another body besides that of which it was originally the act and form.

CHAPTER X.

CAN THE INTELLECTIVE PRINCIPLE OF ITS OWN ACCORD QUIT THE BODY INDEPENDENTLY OF DISORGANIZATION?

691. We have, thus far, left untouched the question whether the death of man can take place without the disorganization of the body. Let us now take up this question and see whether from the principles thus far laid down, be they certain or probable, we can derive any probable answer.

We have said that the animal principle, when it has reached its highest power, by means of the specific perfection of the organization of its felt (body), rises to the perception of the body as a being, and, hence intuites first (in logical, though not in chronological, order) universal being; presupposing the law laid down by God in the primitive institution of human nature.

It follows from this that, as long as the animal feeling retains its specific perfection, it cannot of itself separate from the intellective soul that has arisen in it. But, if it retains this perfection as long as the organization remains intact, it follows that the death of man cannot take place without organic lesion. We must, therefore, inquire whether the fundamental feeling always retains its perfection, so long as the organization is intact.

Now it is unquestionable that the unity and harmony of this feeling cannot be broken up, if the organism remains undamaged, because this organism is the extra-subjective phenomenon corresponding to that unity and harmony.

692. The doubts, therefore, that might arise are reducible to these three:

1.° Can the intellective principle so far withdraw itself

from corporeal things as to exhaust all its virtue in incorporeal things, whether by contemplation or by love?

I reply that naturally* it cannot, because the natural object, being merely an ideal being, does not entirely appease the spirit, nor draw it totally to itself. Besides, no nature can destroy itself through an act tending to its perfection. Finally, if the soul could of its own accord leave the body without disorganizing it, it would follow that in the abandoned body there would still remain the individual animal feeling, and this would again give birth to the intellective soul. But since this new activity would be continuous with the first, inasmuch as there could be no interval of time or nature between them, it would be the first, only reinforced. And this reinforcement actually takes place in all men who are lifted up and magnified through the loving contemplation of eternal truths. Hence the intellective soul cannot spontaneously detach itself from animality.†

693. 2.° Can the intellective principle abandon the body from disdain at seeing itself united to a corrupt body?

It cannot naturally for the same reasons.

694. 3.° Does not death occur from pure spasm, without any alteration of the specific organism? And would not the vital instinct in this case cease to operate and animate the body?‡

* Can it supernaturally? We are told in several passages of the Scriptures that if the vision of God were granted to any living man, it would cause him to die. There is no doubt that this would be so, not because the vision of God would entail the destruction of man, but because it would be incompatible with a disordered body, such as that of man at present is through original sin. Hence I hold that if the human soul, while still in its corruptible body, should see God, the action which the soul would exercise upon the body would be such as to disorganise it, through the very act whereby it would seek to order and perfect it; the reason being that it cannot be perfected without first being dissolved. On the contrary, the perfect body would receive no hurt, but a supreme and transcendent perfection from the beatific vision.

† That the soul grows in its own way is a doctrine taught by the first masters. St. Bernard says: *Necesse est animam crescere ac dilatari ut sit capax Dei. Crescit quidem et extenditur, sed spiritualiter. Crescit non in substantia, sed in virtute.* (*Super Cantic.*, Serm. xxvii.) John of Salisbury, likewise, wrote as follows concerning the growth of the soul: "*Sine ergo multiplicatione partium et quantitatis quadam distensione crescit ratione tantum et intellectu, appetitu boni, aversione mali, manente simplicitatis natura, dilatatur.*" (*Polycraticus*, Bk. III, chap. i.)

‡ On the vital instinct, see *Anthropology*, Bk. II, sec. ii, chap. iii-vi; nos. 371-384.

That there can be extreme pain without any alteration of the specific organism—pain due to mere nervous movements which do not cause any such alteration—seems to us unquestionable, for entire disorganization puts an end to pain.

Whether such pain is sufficient to throw back, so to speak, the activity of the vital instinct and make it cease from the spontaneous act whereby it excites the organized body (the feeling of the continuous could never cease in any case), seems to me doubtful; but even if it were true, the result would be an immediate, intimate disorganization of the body, for the reason that it is just the vital instinct that imparts to organization its final act. Hence, although there should not appear in corpses clear signs of disorganization, we should still have to maintain that they existed. And, indeed, disorganization would necessarily begin in this way in the texture of the elements themselves, and would, therefore, in its first stages be altogether imperceptible.

If, however, we should suppose that pain could be of such a kind and such intensity as to make the vital instinct cease from producing the feeling of excitation, while the organization remained for a few moments entirely intact, it seems to us that then, the intellective soul no longer having the perfect and harmonic feeling to perceive, there would result a momentary suspension of life. But, inasmuch as the pain would then also cease, life would return, nor would the intellective soul, which anew perceived the body, be different from the first, because being independent of place, it would have been neither near to, nor far from, the body. On the contrary, it (the intuitive act) would always have remained an act of the same sentient principle, having as its term the *continuum* of the organized body; and just as this sentient principle, by withdrawing its excitative activity, would have suspended perception without suspending intuition, so, by again putting forth that activity, it would have restored to the soul its corporeal object, that is, the felt body, whose essence it would perceive.

695. And all this does not interfere with the fact that the rational soul, with its passions of sadness, joy, desire, &c., may exercise the greatest influence upon the organization, either destroying it more or less rapidly, or preserving it for a longer or shorter time when, through other causes, it tends to become disordered.

Experience, indeed, shows us that a painful or pleasant surprise may cause disorganization and produce apoplexy.

696. On the other hand, I have no doubt that sometimes human life is prolonged by the mere virtue and force of the intellective principle, which dominates the sensitive one, that is, in cases where, without this domination, the sensitive principle would withdraw itself from its individuating and exciting action. When I read in *Genesis* the description of the death of Jacob, I find confirmation of this belief. The aged father, feeling himself sinking, calls his sons to his bed-side, and collecting his failing powers, delivers to them a long and animated discourse, which the sacred historian records with this conclusion: "And when Jacob had made an end of commanding his sons, he gathered up his feet into the bed and gave up the ghost." * Why did not death surprise him, before he had finished his long discourse? Why, when this was ended, was it so ready? Why did he so peacefully draw up his feet and expire in this spontaneous act? This prolongation of life by the virtue of the intellective principle was likewise observed by several physicians, one of whom writes: "*In limine quàndoque hæret migratura, ut hæredi quæ agenda sunt mandet, aut amicum venientem expectet cui vale dicat, suisque nominis famam in tutelam tradat.*" †

In confirmation of this, be it observed that certain phenomena which foretell the death of man never occur in the lower animals. It is only man who, in the delirium of fever, calls out that he wishes to change his abode and go elsewhere, and so tries to get out of bed and flee away. People who have fevers on shipboard often throw them

* *Genesis* xlix, 33.

† To this passage Nicholls adds a note referring to other authors who give accounts of deferred deaths.

selves into the sea from this desire to get away from where they are. And all this is peculiar to the intellective soul, which, feeling itself ill at ease, endeavours, by its own activity, to alter its condition, and this effort produces in the animality the attempt to change place.* The merely sensitive soul never tends to change its condition, but merely abates something of its individuating act: therefore such a phenomenon never occurs in the lower animals.

697. This further confirms the fact that the intellective soul has a feeling of its own immortality.†

People afflicted with consumption, even when they have reached its last stages, do not foresee their approaching dissolution, but seem to wish to live many years, and go on making projects for the future. This is due to the lively activity which still goes on in their organ of fancy. It is not, properly speaking, a feeling that inspires them with these hopes; it is thought which willingly allows itself to be deluded by images, although it does not really persuade them that they will recover.

* It is true of the intellective soul that, from the time that it is united to the animal principle, its acts, although in themselves merely intellective, entail modifications of the animality and movements in the body. Such are the movements of persons in the delirium of fever, who desire to be transported to other places.

† This fact has been fairly considered as an argument for the immortality of the soul. Francis Nicholls, in his *Prelection*, cited above, writes as follows: "*Si cætera omnia cum ratione ageret, maximum fortasse foret ex his rebus argumentum quod animæ immortalitatem evinceret, quæ e loco levibus de causis incommodo in alium jucundiorem videretur migrare; quasi lætior esset campus et ad suam felicitatem aptior, quo se conferret hospes fastidiosus.*" There are on record many cases of death voluntarily deferred, among them that memorable one related by Nicholas Pechlin, p. 396. There have been pious persons who did not die until they had received permission from their spiritual director to do so. I myself could name an instance of this.

CHAPTER XI.

WHY MAN SHRINKS FROM DYING.

698. In this way we are also able to explain why man shrinks from death, why the intellective soul shrinks from feeling itself deprived of the animal feeling which it naturally apprehends.

If the death of the animal takes place only through the disorganization of the body, or through extreme pain; if the act whereby the soul animates the body is that whereby the *vital instinct* produces excitation, organization, and the feeling of individuality; and if this instinct has a tendency to posit itself in this way; then the repugnance of the animal toward death must be as great as the strength of the vital instinct. Death, therefore, is the worst of evils for the animal, and all that is in it, all the force of the act whereby it exists, must shrink from it.

699. But the rational principle perceives feeling as an entity, as it is: therefore, it perceives it as enjoying or suffering. All that the animal suffers in death is, therefore, perceived by the rational principle. For this reason death must be as repugnant to the rational principle as it is to the animal principle, with this exception, that the rational principle, having another activity besides that of perceiving animal feeling, can console itself with this most excellent of all activities, which remains to it, for what it loses. It loses, but does not perish: the animal loses all, perishes.

700. Moreover, the perception of the body is the first act of the rational principle, the first act of reason, the act in which is given to it the *reality* which it naturally knows. Now the perfection of every being lies in its act, because

"a thing is, in so far as it is in act." But every being has a force whereby it is, and this force, by which it is, is that which makes it shrink from ceasing to be. It is an instinct of being and, therefore, of self-preservation. If, therefore, the rational principle is prevented from performing its first natural act, which makes it what it is, and which virtually contains all its other acts, it must shrink beyond measure from being so prevented. Hence the rational principle shrinks from being deprived of the body with all the force that naturally impels it to perform that act whereby it perceives the animal feeling, and to posit itself as rational. The rational principle, therefore, must feel the greatest repugnance to being separated from animality, although this separation does not altogether deprive it of its first act, inasmuch as it still retains the act whereby it intuites universal being which renders it intellectual and also that whereby it apprehends pure space (no. 554).

CHAPTER XII.

DOES THE SOUL, AFTER IT IS DISEMBODIED, RETAIN ANY INCLINATION TO UNITE ITSELF WITH THE BODY?

701. It is a theological opinion that the soul, when separated from the body, retains a tendency to reunite itself therewith. Has philosophy nothing to say on this point? *

At first sight it seems as if such a question regarding the state of the separated soul went beyond the limits of philosophy. Considering it, however, a little more closely, we find that philosophy may say something about it, in the way, at least, of probable conjecture.

702. Indeed; if by philosophical meditation we are able to know (1) what elements go to constitute the human, that is, the rational, soul, and (2) what elements it loses through the death of man, it seems as if we must likewise know what elements it retains, after the removal of those which death takes away.

Now, if we turn our attention to this question, we immediately fall into a train of reasoning which seems to lead us to a conclusion the opposite of that which theology has arrived at and which we have alluded to.

For the rational soul loses its corporeal term; it, there-

* Theologians are divided on the question, whether the separate soul desires to unite itself with the body, into three main groups. Duns Scotus denies this desire altogether. Suarez denies an *elicit* desire, as he calls it. He says: "*Valde probabile est animam separatam ratione materiali ductam non appetere appetitu elicito reunionem ad corpus, nisi forte velleitate quadam et sub conditione quam putaret impossibilem per naturam;*" but he admits a "*quædam aptitudo naturalis,*" which he improperly calls "*appetitus naturalis*" (*Tract. de Animâ*, Bk. VI, chap. x). St. Thomas, whom we follow, admits a true inclination, a true natural appetite, and proves it. *Sum. Theol.*, Pt. I, q. xxvi, art. i ad 6; *De Spirit. Creat.*, q. iv, art. v; *De Potentia Animæ*, art. ii ad 5, and elsewhere.

fore, retains only the term of essential *being*. But all the activity and reality of a principle is determined solely by its term. Therefore, it can retain no other activity than that whereby it intuites being. If, therefore, its corporeal term is entirely taken from it, the sensitive principle itself vanishes; the intellective principle comes to rest in the idea; there remains no activity which could be the principle of an inclination to resume the body. For the memory of the preceding body must be entirely effaced, since it is impossible to preserve the memory of bodies without some imaginative trace of them, and the imagination ceases, when it loses its proper organ, the brain.* It seems as if we might reason in this way; but this reasoning is defective, because it leaves out an important fact, to which we have called attention, in regard to the human soul.

703. We have shown that every sensitive soul which has as its term a body occupying a limited portion of space, must first (in logical order) have as its term pure, solid, unlimited space, and this because, in the concept of corporeal, limited space as the term of a feeling there is already included an unlimited space, so that that feeling cannot be thought without this. There are other reasons besides this (nos. 554-559). Hence also the rational soul, which is sensitive and intellective, must have the same term of simple, unlimited space. But what takes place in the case of death? Nothing but the dissolution of the bodily organism, and, hence, the dissipation of the corporeo-organic feeling. It is merely the organism that perishes and along with it the correlated feeling. Now the body which limits space is something essentially different from the space which is limited. This space is altogether independent of the body. Space, therefore, cannot be removed from the soul by the mere loss of the corporeal feeling. Hence the rational soul, after it has

* We are here speaking of the separate soul according to its nature, apart altogether from those additions which it might receive in the other life through divine disposition. See the *Appendix* to the *Theodicy*, nos. 48, 49.

lost the bod must still retain two terms, viz: (1) essential being, which renders it intellective, (2) pure, unlimited space. It follows that, through this second term, the soul still maintains a certain relation to the extended universe, because it feels the extension of it.* Now, we have seen that the principle which feels unlimited space is the root of the corporeal sensitive principle (no. 558), is, as the principle of the sensitive principle, the remote principle of feeling. And this is no unimportant result—to have discovered that the human soul, when separated from the body, still retains the root of the power of feeling.

704. But this is not all. We must here appeal to an ontological and cosmological theorem, which is this: "Every principle has an existence conditioned by its term: but when it already exists, it has an activity of its own, related to the same term." This theorem may be proved by close observation of any subject, because, if the subject or principle cannot be conceived as existing without its term, it is certain, from experience, that, when it exists, it may exhibit different activities and exercise different functions relative to its term. Of this important truth we shall speak more at length in the second part. Taking it for granted at present, it follows that in the separate soul the identical subject remains that existed before the perception of the body ceased. There is, therefore, no logical difficulty in supposing that, when the actual perception of body ceases, this identical subject, susceptible of activity, should still retain certain habitual dispositions and tendencies. And since corporeal sensation is an act of the principle which has space for its term, there is no logical reason to prevent this same principle from retaining an inclination to the preceding act, that is, the preceding perception, and from turning to it, as an eye which looks at an object, may continue to gaze in the same direction and with the same intensity

* How fitting are the words used by St. Paul to describe death: "For the *fashion* of this world passeth away!" (1 Corinth. vii, 31). The word *fashion* [or figure] properly signifies that limitation of space made by corporeal substance, not space itself.

even after the object is removed and it can no longer see anything.

705. It seems certain to us that what we have said of the eye we must say of the intellective principle, which remains identical in the separate soul. This principle has once been in act in the perception of corporeal feeling; and this actuation must remain with it, as has just been said of the sensitive principle of space, although it no longer has any matter on which to exercise itself. In fact, the perception of the natural corporeal feeling embraced (1) the principle sensitive of space with its term, space; (2) the principle sensitive of the body, with its term, the body, which principle, as we saw, is an act individuating the first; (3) the principle intuiting being. What ceases with the separation of the soul from the body is the second of these three elements. There remains, therefore, the intellective perception of the feeling of space, that is, of the principle and term of this feeling. But the principle of this feeling preserves the actuality which placed it in relation to body. Hence the rational principle remains with its inclination, because it perceives a sensitive principle inclined toward the bodily term.

706. This theory, further, contains the reason why the separate soul naturally maintains its own individuality. Although a principle having for its term pure space, and containing no other reality, would necessarily be unique, and therefore would not possess the individuation peculiar to the principle that feels the body (no. 557), still, as soon as an activity tending toward body united itself with this principle, this new activity or reality would individuate it. The reason of this is that, as we said, matter is divisible and consequently in its nature multipliable, so that one portion of matter is not another. Hence St. Thomas proves, from the relation which the intellect has with matter, that there are individual intellects and hence that all intellects are not one intellect.* This truth led the

* *Licet anima intellectiva non habeat materiam ex qua fit, sicut nec angelus; tamen est forma materiæ alicujus quod angelo non convenit. Et ideo, secun-*

Schoolmen to declare that matter universally was the principle of individuation; but this proposition errs from too great generality, as we have elsewhere shown, because all reality, when it can be distinct, is already, in itself a principle of individuation, whether the reality be spiritual or material. St. Thomas, observing this, corrected the statement of the Schoolmen by adding to it certain limitations, among others, this: "Form individuates itself."

The intellective soul when separated from the body, therefore, remains individuated primarily by the perception which it preserves of that feeling which relates to space, which feeling is individuated by reason of the activity which it retains towards the corporeal feeling.

707. Here, however, we must not fail to make a most important observation, which is, that the individuation of the intellective soul and the individuation of the sensitive principle take place under different conditions. The sensitive principle is individuated immediately by the division of matter, because, by its own essence, it is united to the elements. For this reason, when the elements are divided and discontinuous, every elementary feeling is a different individual. Consequently, if two groups of elements formed organizations in every respect the same, there would be two similar organic feelings, but not one single, identical feeling. Consequently, the intellective souls which perceived these feelings would be two and not one, and, therefore, there would be two separate souls. But, on the other hand, if God, in His Omnipotence should change the organism of an intellective soul which perceived the organic feeling, putting in place of it another exactly similar, so that there should be no change in the perceived organic feeling, then the intellective soul would not in any way observe the change, since this would have been confined to the matter, and would not have extended to the feeling which alone is immediately perceived by it.

dum divisionem materiæ, sunt multæ animæ unius speciei, multi autem angeli unius speciei omnino esse non possunt (*Sum. Theol.*, Pt. I, q. lxxvi, art. iii ad 1).

Hence this soul would not, in any way, lose its identity. This fact is confirmed likewise by experience, which shows that the matter of the body changes as life advances without in the least interfering with the identity of the soul. And not only does the matter of the body change, but the organic feeling does so likewise, although never specifically. It follows from this that the individuality of the intellective soul is not due to the individuation of matter as such, but to the individuality of feeling, and that it is only when these individual feelings are several that the intellective souls correlated with them are several, because an intellective soul cannot perceive two or more organic feelings, but only one. This is so true, that it owes its origin to a single feeling, although after it is originated and constituted, it is able to subsist by itself.

708. But, after all this, the individuality of the intellective soul already constituted owes its individuation also to another source. It performs a variety of rational acts, and these acts are the putting forth of a new activity, by means of which it differentiates and individuates itself, acquiring an addition of reality, which consists in activity. Now, although, in losing its organic feeling, the separate soul is deprived of the terms of these acts, yet, inasmuch as it does not lose its identity, it retains the activity corresponding to them, for the reason indicated, that a constituted principle, in existing, has an activity proper to itself and independent of its term (no. 707). Hence, although the soul, in separating from the body, loses all the knowledge which it has acquired in the present life, at least in its actual form, which required a bodily organ, still it retains the activity which it has acquired, and this is sufficient to individuate it.*

* In the system of Plato, according to which the soul is merely the mover of the body, it cannot be admitted that the separate soul retains any tendency toward the body. On the contrary, the Platonists consider the body as a prison, but this comes from their observing the disorders which at present degrade humanity, and not knowing that these are not its nature, but the effect of the original sin, which corrupted and debased the whole man. They accordingly regard the union of the soul with the body as an *imperfection*, a punishment. But this is absurd, and proves nothing but the erroneousness of that system.

709. Against this theory objections may certainly be raised; but they do not seem to me at all insoluble. We will enumerate those which seem to us most relevant, and, in answering them, we shall render the theory itself more clear and complete.

First Objection. "You have said that the intellective soul retains the perception of the feeling of space. But, if so, will the elements into which the human body dissolves, and which have their own corporeal feelings, be without this feeling?"

Reply. No; the feeling of space remains united both to the intellective soul and to the remaining elements or organisms; for the simple reason that, being by nature a single feeling, it can multiply itself, in other words, it can remain united both to the subject, the intellective soul, and to the corporeal sensitive principles separated from the soul. It preserves its oneness and identity in itself, but it may be united to several subjects which thus individuate it. There is nothing illogical in this, nothing that conflicts with the nature of sensitive principles.

710. *Second Objection.* "You have said that, when the term is identical, and the principle correlated with it has no other reality than what comes from being the principle of that term, this principle must likewise be one and identical. Now intellective souls have for their term one and the same being. Therefore in themselves they cannot be several, but only one."

Reply. True; but when the principle is once brought into being, it can have a reality and an activity of its own different from that which is included in the bare concept of principle. As soon, therefore, as this individuality displays any activity of its own, it at once acquires from it individuation. And thus there is a plurality of human souls, in the first place, because they have, as their terms, distinct organic feelings, in the second, because they have each a special rational activity, displaying itself in the acts of reason which they put forth from the first moment of their existence. If we were to suppose intelligences different

from that of man, and having no other term than this same intelligible being, and all intuiting it in the same degree, and having no other reality but what came from this intuition, these would certainly lack the principle of individuation, and would be only one, because we could conceive no more than one reality of this kind. All that can be inferred, therefore, from the objection, is that souls, besides containing something that individuates and distinguishes them, all retain a common, mysterious bond, a subjective root both of sense and intelligence, a root forming the basis of the unity of the human species even in its *reality*, and furnishing, in large measure, the ground of that sympathy which individuals of the same species feel for each other. It is for this reason that men at some moments feel as if they were all one man.

711. *Third Objection.* If separate souls retain an inclination to the perception of the fundamental corporeal feeling, this, if not satisfied, will prevent them from being happy.

Reply. Divine revelation teaches that righteous souls, which receive their eternal reward, find everything in God through Christ. If, however, we consider the soul in itself, without the additions which it receives from Divine goodness and justice, we must admit that the human soul, when separated from the body, remains imperfect, because deprived of its natural act; but we must add that it feels no pain from this, because no habitual tendency is painful, so long as it makes no attempt to find satisfaction. Now all possibility of attempt is taken away, because the corporeal term is entirely removed, and no one can make any effort to act if he has not present to him the term of his act. The truth is, an attempt requires something in order to form itself, and is never made with relation to nothing.

CHAPTER XIII.

THE ABOVE DOCTRINE REGARDING THE UNION OF SOUL AND BODY AVOIDS THE OPPOSITE ERRORS.

712. And here let us stop and consider how the theory set forth with regard to the nexus between soul and body not only corresponds with the facts and explains them, but also avoids the rocks upon which other systems have made a more or less complete shipwreck. I will not repeat what has been already said, or, if I do so, I shall place it in a new light.

713. The systems propounded with regard to the union of soul and body are wont to fall into two extremes. Some, feeling too clearly that the human soul is one, have sought to make it so by neglecting one or the other of the two active principles in man, the sensitive or the intellective, and so have not caught the bond which unites them. Others, observing the doubleness of these two principles of action, have left them separate, and so endowed man with two or more souls.

The first may be divided into three systems, either erroneous or imperfect.

There have been those, who, not knowing how to explain the union of the rational principle with the body, have referred everything to the sensitive soul. This system of sensism we have entirely excluded by showing clearly the specific difference between the sensitive and intellective principles, a difference due to the specific difference of their terms, the *felt* and universal *being*.

714. Others, fixing their attention solely on the rational principle, and seeing that this is what is peculiar to man, and not knowing how to reconcile with it the sensitive

principle, have said that the sensitive soul, in feeling, reasoned—that feeling itself was a kind of knowing, or that the intellect felt. Plato seems sometimes to have conceived the matter in this way. But this *rational system* errs in the same way as the *sensistic system*. It abolishes the specific distinction between the sensitive animal principle and the rational principle.

715. Finally, there have been some who were clearly aware that feeling is not understanding, and that understanding is not animal feeling, but who yet said that they were like two immediate activities of the same soul. They set out with true principles, that is, with the principle that the intellective soul "*virtute continet inferiores formas*," * and the other, that "*unius rei est unum esse substantiale et una substantialis forma*," † and sought to avoid the error of attributing to man two souls, or two or more substantial forms. But, if feeling and understanding were merely two activities of the intellective soul, there would result a very serious difficulty. To feel is not to understand, sense is not intelligence: if these two things entered into the soul as parts of its essence, we should have two forms making one form, which conflicts with the unity of form. If feeling, on the other hand, is merely a faculty of intelligence, it cannot be without a subject, and, therefore, we should have to consider the lower animals either intelligent beings or machines. To say that, in the lower animals a special subject is added to this faculty is gratuitous, because feeling in man and feeling in the lower animals, considered as feeling, are of the same nature, so that in the case supposed we should be adding to feeling in the lower animals something besides feeling, whereas there is nothing to be found in them but feeling. On the other hand, the soul is intellective only in so far as it performs acts of intelligence. If intelligence is the essence of this soul, it cannot be the immediate principle of feeling, because the immediate sentient, in so far as it is sentient, is not intelligent, is not the intellective soul. Besides,

* St. Thomas, *Sum. Theol.*, Pt. I, q. lxxvi, art. iv. † *Ibid.*

intelligence cannot perceive feeling unless this is already formed; feeling, therefore, requires a principle to form it (to feel), and thus to supply intelligence with the material of perception.

716. We may add to this that, if the intellective soul were the proximate, immediate and single principle of feeling, the sensations and consequent animal movements would always come as consequences of acts of intelligence; but this is opposed to experience, since in man the sense moves even without preceding acts of intelligence.* It follows that the principle which causes animal movements is not always the intellective soul. We must, therefore, find a system which shall show how man can have one soul and one substantial form, and yet how the two active principles of feeling and understanding may be so connected as not to constitute two souls, and yet so separated that the sense can move without being moved by the intellective activity.

717. The philosophers who have tried to maintain this second condition have often fallen into an error the opposite of that of the systems mentioned, the error of giving man several souls.†

I do not mean to say that when the whole of antiquity distinguished between *soul* and *spirit* (*anima* and *animus*), it meant to place two souls in man. Common sense admitted this distinction which is expressed in language itself; but it made no dogmatic assertion, it did not trouble itself to decide the question at issue, and I consider the use of these two words, or equivalent ones, as a testimony of the human race in favour, not of two souls, but of two active principles in man, each having an activity of its

* *Treatise on the Conscience*, nos. 89-93.

† Gennadius says that this error respecting the two souls was current in Syria. "*Neque duas esse animas dicimus, sicut Jacobus et alii Syrorum scribunt, unam animalem quâ animetur corpus et* IMMIXTA SIT SANGUINI; *et alteram spiritualem, quæ rationem ministret.*" (*De Eccles. Dogmat.*, chap. xiv.) Origen likewise, in his work, Περὶ ἀρχῶν (*On Principles*), iii, 4, seems to attribute two souls to man, and say that when "the flesh" is named in the Scriptures, we must understand it to mean the *soul of the flesh*. It is certain that we must understand the sensitive principle, but this is an activity of man, not a distinct soul.

own, but the one receiving the other into it and dominating it. In order that we may better see how this distinction of the two active principles was recognised, let us cite a few authorities.

718. In the Scriptures the *flesh* and the *spirit* are continually distinguished as two adversaries, and certainly it is not dead flesh, but living flesh that is meant.

St. Paul distinguishes the soul from the spirit in speaking of the efficacy of the word of God: "Piercing even to the dividing asunder of soul and spirit."* In Plato, in a fragment of the Timæus, we read: "*Intelligentiam in* ANIMO: ANIMAM *conclusit in corpore.*"

Josephus says: "*Immisitque (Deus) in hominem* SPIRITUM *et* ANIMAM." †

Juvenal writes:

"*Principio indulsit communis conditor illis*
Tantum ANIMAM, *nobis* ANIMUM *quoque.*" ‡

An illustrious Savoyard, who is perhaps a little too much inclined to the system of the two souls, after having adduced the authorities transcribed by us, points in the following passage to the thought of the ancients, as well as to certain physiological facts which show the existence of two activities in man, although they do not in the least show the existence of two souls. ‖

"Antiquity," he says, "believed that between the *spirit* and the body there could not be any kind of bond or contact, so that the *soul* or sensitive principle was for them a kind of *mean proportional*, or intermediate activity, with which the spirit was united as it was itself united with the body. §

* *Hebrews* iv, 12.

† *Jewish Antiquities*, Bk. I, chap. i, no. 2.

‡ *Sat.* xv, 148, 149.

‖ De Maistre, *Eclaircissement sur les Sacrifices*, chap. i.

§ The same view was held by Malebranche, Leibniz, and many other noble intellects of modern times; because they had not penetrated into the nature of the subjective body, and had not formed any other idea of the body than that furnished by external experience, which (properly speaking) makes us feel only a dead body, and not the life of the body. On the other hand, there could be no mean proportional between the extra-subjective body and the intelligent spirit. Besides, the sensitive soul does not exist separate from the body to which it essentially adheres, because a principle cannot

'Representing the *soul* under the image of an eye, according to the ingenious comparison of Lucretius, they looked upon the *spirit* as the light of the eye.* In another passage he calls it the *soul of the soul;* † and Plato, following Homer, calls it the *heart of the soul*,‡ an expression repeated by Philo.‖

"In Homer, when Zeus decides to render a hero victorious, 'the god has weighed the resolution *in his spirit;*§ it is *one;* there cannot be any conflict in it.'

"When a man knows his duty, and performs it without hesitation, on a difficult occasion, he sees the thing, as a god, in his *spirit.*¶

"But if, balancing long between his duty and his passion, he is on the point of committing an inexcusable violence, then he has deliberated *in his soul and in his spirit.***

"Sometimes the spirit reproves the soul and makes it blush for its weakness. 'Courage!' it says, 'my soul; thou hast borne harder things than these.' ††

"And another poet drew from this struggle a really charming dialogue: 'I cannot,' he says, 'grant thee, O my soul, all thou desirest: remember that thou art not the only one that cravest what thou lovest.' ‡‡

exist without a term. Now if they had reached the concept of a *substantial feeling* having a simple principle and an extended term, they would have seen that the intellective principle communicates not only with the principle (the soul), but also with the term (the body), yet not with the body separate from its immediate principle, but with the one single feeling in which the sensible principle and the body are indissolubly joined. Be it observed, moreover, that the sensitive principle, called by the ancients *soul* [anima, ψυχή], is properly a soul only when it is alone, as in the brutes, not when it is united to the intellective principle as it is in man.

* *Ut lacerato oculo circum, si pupula mansit incolumis. De Rerum Nat.*, iii, 409 sq.

† *Atque anima est animæ proporro totius ipsa. Ib.* 276.

‡ *Theætetus.*

‖ *De Opif. Mundi.*

§ *Iliad*, ii, 3.

¶ *Iliad*, i, 333.

** *Iliad*, i, 193. There is no doubt that it is always the rational principle that deliberates in favour of duty rather than of passion; but the rational principle is checked and tempted by another activity opposed to it, and this, for the most part, is the sensitive activity.

†† *Odyss.*, xx, 18. Plato, citing this verse in the *Phaidôn*, sees in it one power speaking to another. It is, nevertheless, the same intelligent spirit that reproves itself, that is, reproves its own intelligent will, since the animal principle is not capable of receiving reproofs or encouragements; but even the intelligent spirit would not be able to rebuke or encourage itself, if it were not passive toward a foreign power which solicits and tempts it.

‡‡ Theognis, *Frag.* vv. 72, 73. Edit. Brunkii. And who does not know among us the *Capricci del Bottaio,*

"'What do we mean,' asks Plato, 'when we say that a man has conquered himself, that he has shown himself stronger than himself?' &c. Here we affirm that he is at once stronger and weaker than himself; for he is the weaker, and he is likewise what was the stronger. We affirm both things of the same subject. Now the will supposed to be one, could not come into contradiction with itself, any more than a body could move at once with two actual, opposite motions;* for no subject can unite in itself two contraries at once.† 'If man were one,' says Hippocrates, excellently, 'he would never be sick,' and the reason of this is simple; 'because,' he adds, 'we can conceive no cause of sickness in that which is one.'‡

"When, therefore, Cicero wrote: 'When we are enjoined to command ourselves, it is meant that reason must command passion,' he either understood passion to be a person, or he did not understand himself.‖

"Pascal certainly had in view the ideas of Plato, when he said: 'This doubleness of man is so plain that some persons have thought we had two souls; it seemed to them that a simple subject would be incapable of such and so sudden variations.'"§

All these observations do not prove the existence of two souls in man, but they do prove the existence of two prin-

which are dialogues between Justus and Justus' soul.

* *De Repub.* This merely proves that the will may be moved by contrary motives proposed to it by the intellect. But the intellect, without ceasing to be one, apprehends several things, even contrary to each other, because they are all contained in the unity of universal being. Still the argument shows that in man there is a feeling, which, so far from being the rational soul, is sometimes opposed to it.

† This principle of Aristotle's (*Categor de quantitate*) does not prevent the understanding from being able to perceive opposites, nor the will from willing them; because things, even when opposed, agree in being, in which the intellect perceives them, and in which they are *one* (*une*).

‡ *De Natura humana.* This saying of Hippokratês' has nothing to do with the doctrine of two souls, because even the lower animals have diseases. The duality which produces diseases in animals is that of soul and matter, of the principle and term of feeling. The organic term may dissolve into its elements. The organic body, even if supposed continuous, virtually contains plurality.

‖ *Quæst. Tuscul.*, ii, 21. Here the illustrious writer falls into error. To *command* (imperare) in this passage of Cicero means to *order*, and in order that a thing may be ordered it is not necessary that it be a person. It is, however, necessary that what orders should be a person.

§ *Pensées*, iii, 13.

ciples, or, if the expression be preferred, of two lives.* The difficulty, therefore, which Lactantius calls *inextricable*,† consists in finding a system in which the active principles in man remain distinct, and yet the error of supposing two souls is avoided; and we think the system proposed by us satisfies these conditions.

719. Indeed we have said:

1.° That the union of the soul with the body takes place by means of an immanent natural perception, through which the rational principle perceives the *fundamental animal feeling*, and that in perception lies a physical nexus, such that "*ex percipiente et percepto fit unum.*" Now, although the union between the percipient and the perceived is physical, so that the result is one composite substance, yet the components retain a real distinction (although no separation), since the percipient is not the perceived, or *vice versâ*.

2.° That rational perception is an act of the *rational principle*, and, therefore, peculiar to man, whom we have defined as a "rational subject," whence, that which, as form, unites with the animal feeling, is the rational soul, the only soul belonging to man.

3.° But what is perceived is known, and, therefore, the rational soul knows the animal feeling. In order to know it, moreover, it must share it; otherwise, it would not perceive it. Hence, in the rational soul there is feeling, but not mere naked feeling. There is feeling in its condition of *being;* hence the rational principle is also sensitive, but not as the animal principle is, which is the immediate principle of feeling. It is sensitive in a much higher way, inasmuch as it perceives being in all its grades, and, therefore, also in the grade of animal feeling. And this confirms the saying of St. Thomas, that the rational soul

* The double life of man is admitted by ecclesiastical writers. To cite one example, Lactantius writes: "*Quia homo ex duabus rebus constat, corpore et anima, quorum alterum terrenum, alterum cœleste, duæ vitæ homini attributæ sunt, una temporalis quæ corpori assignatur, altera sempiterna, quæ animæ subjacet.*" (Bk. VII, chap. v.)

† "*Sequitur alia, et ipsa* INEXTRICABILIS QUÆSTIO, *idemne sit* ANIMA *et* ANIMUS; *an vero aliud sit illud quo vivimus, aliud autem quo sentimus et sapimus.*" (*De Opif. Dei*, chap. xviii.)

"*virtute continet animam sensitivam et nutritivam.*" (*Sum. Theol.*, Pt. I, q. lxxvi, art. iv.)

4.° Now, at the same time, the purely sensitive principle, though perceived, preserves its difference from the percipient rational principle, inasmuch as it is the immediate principle of animal feeling; because the fact of its being perceived does not confound it with the percipient. We see this clearly, when we consider that the animal feeling could not be perceived by the intellective principle, if it did not exist, because what is perceived must exist. For this reason, it is not the rational principle that makes feeling exist, but the immediate principle of feeling itself, and this feeling is perceived as soon as it exists. In this way we explain how animal feeling is dissolved without any intervention of the rational principle, and how when it is dissolved it ceases to be perceived, and so entails the death of man. If, on the other hand, the animal feeling were directly produced by the rational feeling, it would never be dissipated, because so long as the cause remained, so also would the effect; and death would be inexplicable.

5.° And thus also is explained the struggle that goes on in man, which presupposes two activities. For there remains an activity in the percipient, and an activity in the perceived, although they are substantially united in perception.

6.° At the same time we explain likewise the dominion which the rational soul ought by nature to have over animality, because, in the union between the percipient and the perceived, it is the percipient that is active. This becomes the more clear when we consider that we are here speaking of *rational perception*, in which the *perceived* (animal feeling) is apprehended under the condition of *being*, and, therefore, in a more intimate and perfect manner than that in which the sensitive principle perceives matter, on which it depends, in large measure, as on a third foreign activity (extra-subjective). But since in the felt, that is, in the body, the immediate agent, is the

sentient principle, the rational principle rules the body, through the power which it exercises over the sentient principle, united to itself through perception.

7.° We observe, further, although there may spring up in animal feeling alterations and changes independent of the rational activity, whether through the action of the sensitive principle itself, or through the action of matter, such passions are not attributed to man as to their cause, because man is only the rational principle and the rest is a series of conditions and appendages.*

8.° The rational principle, therefore, is the only substantial form constituting man—a form which virtually contains all the other forms. For this reason the sensitive principle, *as such*, belongs to the *matter*, and not to the *form*, of man. Hence, as the form of man is the rational principle, so the matter which this principle informs is not the dead body, but the living animal body, or the animal feeling, which is informed through perception, being thereby raised to the condition of *being*, the object of the rational soul, and variously modified by the action of the soul.

9.° But this is not all. The animal feeling, whether perceived or not perceived by the intellective soul, is identical. It is not doubled by being perceived, it merely exists in two modes, that is, in itself and in the percipient. If, therefore, the percipient does not alter the nature of the animal feeling by perceiving it, it does not alter either its principle or its term. But the principle of animal feeling is a perfectly simple activity. Hence, in perceiving this sentient activity, it receives it into itself as being. Hence, the simple percipient receives into itself by perception another simple activity. Herein lies the identification of

* Here we may observe that those physiologists who regard the vitality of the body as having a principle distinct from the animal principle, are partly right, although, from ignorance of psychological doctrines, they exaggerate the independence of this principle, as Barthez does, when he says of it: "Il est absolûment indépendant de l'âme pensante, et même du corps, suivant toutes les vraies semblances" (*Nouveaux Elémens de la Science de l'Homme*). Still, if by this independence he meant no more than a real distinction, the inaccuracy would be one merely of words.

the two principles, the sensitive and the percipient, and the resulting principle is the rational soul, united to the body, of which we may say with an ancient author: "*Unus et idem spiritus et ad se ipsum* SPIRITUS *dicitur, et ad corpus* ANIMA:—*Anima dicitur in quantum est vita corporis, spiritus autem in quantum est vita substantiæ spiritualis.*" *

10.° And since there are two activities identified, in so far as the one activity has gone to increase the virtue of the other, the sensitive activity may cease without entailing the cessation of the rational activity. Hence the Scriptures teach us to lose the *soul* in order to save the *spirit*. The author just cited says, in the same place: "*In qua vita* ANIMA *perditur ut Spiritus salvus fiat.*"

11.° Moreover, the distinction above drawn between the two activities is not destroyed by the fact upon which we have insisted, that the intellective act springs up within the animal activity and is like a new actuation of the same subject. This proves, indeed, that the principle of the two activities is the same, by reason even of their common origin; but it does not prevent them from being specifically and infinitely different, since the nature of any activity is always formed by its term and not by its generative and imperfect beginning, and here the term varies as far as universal being differs from the felt extended. Hence, as soon as the intellectual and rational activity springs up, it is an altogether new nature, an imperishable substance, so different from the sensitive activity that it would be altogether separate from it, were it not united to it through perception, which is the bond between the two terms, the *animal feeling* and the *intellective being*, the bond that prevents the intellective virtue from separating from the sensitive virtue.

Let us now add some other proofs in confirmation of the perpetual duration of the human soul.

* *Tractat. super* MAGNIFICAT., among the doubtful works of St. Augustine.

CHAPTER XI

OTHER PROOFS OF THE IMMORTALITY OF THE HUMAN SOUL.

720. We have worked out the proof of the immortality of the soul, setting out from the principle that the nature of every subject is determined by its term (676-680). It follows from this that the human soul, having for this term universal being, which is in its nature eternal and impassible, must endure for ever.

This is the fundamental proof to which all other proofs thus far advanced reduce themselves. We will, however, add the chief of those other proofs which we have not thus far expressly mentioned.

721. I. The immortality of the soul has been proved from the fact of its containing a celestial or divine element, and although we are not clearly informed wherein this element consists, it has nevertheless been recognised as existing in it and residing in the intellective part.

Thus Lactantius says: "Although they (the body and the soul) are born united and associated, and although the one, formed by earthly concretion is, as it were, the vessel of that other which is drawn from the subtle heavenly nature, yet, when any force separates them by the separation called death, each returns to its own proper condition. That which was of earth, dissolves into earth; that which was of divine breath, remains and flourishes for ever, because the divine breath is eternal." *

* Bk. VII, chap. xii.

Prudentius puts the same argument in verse:

"*Oris opus, vigor igneolus*
Non moritur, quia FLANTE DEO *
Compositus, superoque fluens
De solio Patris artificis
VIM LIQUIDÆ RATIONIS HABET." †

722. II. The immortality of the soul has, in the second place, been proved from the fact that it contains no contrary elements, because destruction in all cases arises from the struggles between contraries. Now, every substantial subject has a principle, and a term which determines its nature. In the principle of the subject there can never be any contrary elements, because it can never be anything but a simple activity. Hence struggle can insinuate itself only into the term. And this happens, indeed, in the case of animal life. The multiple and organic term—the extended—receives contrary agents, which can rend and destroy it. On the contrary, the intellective soul, having *being* for its term, and this embracing everything under the same relation of entity, does not admit contrary elements, because in being even contrary elements are unified and equalized. Thus the argument that intelligence does not admit any conflict of contraries, and, therefore, is not subject to death, is likewise reduced to the argument drawn from intuited being.

Vincent of Burgundy sets it forth thus: "Observe that the soul, considered *with respect to its origin*, that is, in so far as it has being, may *not be*, and is of corruptible nature (contingent) in this sense that it is capable of

* The whole of Jewish and Christian antiquity agrees in making the divine element of the soul, which we have determined as *universal being*, come from the first breath which God breathed into Adam, and in which the whole of human nature was summed up.

† *Hymn III.* Henry Suso also proves the immortality of the soul from the divine element in reason: "*Æternum anima, permanet,* OB RATIONALEM SUAM. DIGNITATEM ET VIRES DEIFORMES. *Deus enim supereссentialis, est mens et intelligentia, ad cujus imaginem ipsa anima formata est*" (*Quædam sublimes Quæstiones,* Appendix, chap. xv). And Æneas of Gaza says that every rational act of the soul is a proof of its immortality: "*Omnis enim ars, omnis scientia, itemque actio et contemplatio satis superque docere possunt, animam hominis esse immortalem*" (*In. Theophr.*).

returning to non-being, if the will of the first being did not prevent it. But considered *with respect to its essence or substance*, it is incorruptible, because it does not result from contrary elements, and because there is nothing contrary to its nature, whereby it could be corrupted." *

723. III. Similar to this is the common argument whereby the immortality of the soul is proved from its simplicity. It is not enough to prove it simple in its principle, because even the souls of the lower animals are simple in their principle. We must further prove the simplicity of its term to which it owes its nature, in order that the argument may be valid, and, therefore, we must have recourse to universal being, which is perfectly simple. The argument deduced from the simplicity of the soul is set forth by St. Irenæus,† and by St. Gregory Thaumaturgus, and repeated by all later thinkers. We shall quote the words of the last Father. "When the soul is bereft of the body, it is simple, that is, it is not compound or composed of parts. Now it seems to me that what is simple is immortal. But how shall I prove this? Attention! Nothing corrupts itself, otherwise it could not endure even at the beginning; but those things which are corrupted are corrupted through contraries. That which is corrupted is dissolved; that which is dissolved is compound: the compound has a plurality of parts; that which has a plurality of parts has different parts; that which is different is not the same. Hence, the soul being simple, and not composed of parts, for the reason that it is not composed or dissoluble, is necessarily incorruptible and immortal." ‡

He says that, if the parts are several, they must be different, because, if they had not any difference, their plurality would not be discernible, and, indeed, would not be. He says that, if the parts are different, the being composed of them is not the same, is not in every respect equal to itself. Admitting differences, it admits contrariety. But in the object of the intellect there is no

* *Speculum Historiale*, Bk. I, chap. xxxiv. † Bk. V, chap. vii.
‡ *Lib. de Animâ.*

difference, because the intellect conceives everything in the unity of the same being. The holy Bishop of Neo-Cæsarea here almost touches the speculations of the School of Elea.

724. IV. A fourth argument, and a very strong one, is drawn by ecclesiastical writers, after the Greek philosophers, *e.g.*, by Origen, Lactantius, Leontius, and others, from the claims of justice, which, not being always satisfied in this life, call for another life in which the righteous shall receive their just reward and the unrighteous a just retribution. But whence comes this necessity that justice should triumph? From the fact that justice is immutable and eternal. Now this eternity of justice is entirely based upon the eternity and immutability of being, which shines in the human mind, as we showed in the moral works.

725. V. In a similar way, Socrates in the *Phædon* proves the immortality of the soul, arguing that, since man is made for justice, and since he is able and bound to love it, he must be immortal, because made and ordered with reference to something immortal. And he endeavours to show that the body is only a kind of veil that separates our understanding from the wondrous view of justice to which it is by nature united. In this way he felt and confessed a Holy God, the Unknown God [Ἄγνωστος θεός] of the Athenians.*

726. VI. Inasmuch then as the term of the human understanding is being, which is something immortal, and the understanding receives its nature and form from this

* This intimate feeling that moral good is an eternal thing, and that man is made for it, has a great hold in the minds of good men. The conversations of the dying Socrates, as reported in the *Phædon*, whether true or imaginary, show this truth; for, if they are invented, they would not have been so grandly invented if Plato had not thought them probable and altogether in keeping with the character of one whom he meant to represent as the type of the just man. Suidas affirms that the philosopher Hermias was of the same mode of thinking.

Solers vero et valde acutus erat, ut Ægypto (fratri Theodotes) morienti Jurejurando confirmasse dicitur animam esse immortalem et interitus expertem. Hanc autem fiduciam ipsi afferebat ipsa vitæ integritas, quæ corporis naturam aversabatur, et ad se ipsam convertebat, et simul animadvertebat ipsam corporis et animæ separationem, atque adeo, manifeste jam ipsam immortalitatem. But if this feeling of the immortality of the soul is so strong in the good and virtuous, whence then comes the belief in mortality? From vice, from dissoluteness, which fixes the thoughts upon the flesh, and quenches in them the light of honesty, and, in consequence, the feeling of that which is immortal.

term, it is no wonder if it has the feeling of its own immortal nature. And from this feeling we derive a new proof of the truth of which we have been treating, because feeling, being the work of nature, does not err or deceive. "Man continually manifests this feeling of his own immortality, in actions and enterprises that endure beyond the limits of the present life, in the love of long renown, in contempt of death, in suicide, of which man alone is capable, and, finally, in the power of thought and strength of soul which the dying man often shows. "When the soul," says St. Athanasius, "has entered into, and been bound to, the body, it does not contract itself to the diminutive size of the body or take its form, but often, when the body is lying in bed motionless, the soul remains awake with its own forces, rises above the conditions of the body, and, like a stranger to it, though confined in it, goes on imagining and beholding supermundane things. And often even, besides leaving earthly bodies, it goes forth to meet Saints and Angels, and rises up to them borne by the purity of its own mind. How then can it fail, when it is loosed from the body, according to the pleasure of God, who joined it to the body, to have a clearer knowledge of immortality?" *

727. VII. It was from these feelings, which, if they are not drowned or quenched in vice, are so natural to man, that sprang the universal agreement among all peoples in favour of the immortality of the soul, which is itself another powerful and persuasive argument for the truth of it.

* *Orat. contra Idola.*

CHAPTER XV.

CONCLUSION.

728. Having reached this point, we think we may say in closing this first part of the *Psychology*: Man, then, has no reason to regret the labour he has undergone in arriving at a knowledge of himself, if this labour brings so happy a result, and assures him that his nobler part, the soul, through which he lives and understands, will endure for ever. This truth raises him above all the measureless masses which go to make up the universe destined to dissolution, and reveals to him that an immortal home must be in store for him after the dissolution of matter. Having reached this point, he may ask himself: Why was this soul of mine made? For what end does it exist? What goods are proportioned to its nature? And to these sublime and necessary questions—necessary because human nature can never resign itself to live in ignorance or uncertainty with regard to them—a firm and undoubting reply may now be given by him who by self-study has reached perfect certainty with regard to the immortality of his own soul. For it is clear that to an immortal being no goods are proportionate, none can be suitable save those that are immortal and divine. Hence *Psychology* prepares us for, and leads us to, the search for these goods.

729. There are men, wise in their own estimation, but in truth enemies of wisdom, who overflow with reproaches against those who rise above the senses and apply their minds to the noblest of all investigations. These querulous and cross-grained people do not hesitate to revile the in-

dustry and diligence of those lofty intellects, as if they had all the while been attempting the impossible and wasting their time in vague speculations; for they deem all those speculations vain which impart to man the knowledge, and prepare him for the possession, of eternal things; because they do not confine themselves to increasing temporal goods. These discouraging people have certain canons and opinions of their own, which, without any proof, they proclaim to be unquestionable, and which all begin with words like these: "We cannot know," or "We cannot discover." One most solemn and frequently repeated canon is this: "We cannot know the essence of things," and especially, "We cannot know the essence of the soul." When Zeno denied the existence of motion, Diogenes refuted him by simply getting up and walking. In the five preceding books we have treated of the essence of the soul, instead of disputing as to whether this essence is knowable. Diogenes' argument was not truly cogent, because it opposed a physical fact to metaphysical speculations; but still the principle maintained by that philosopher is strictly true, that what *is* cannot be held impossible. Hence we would fain believe that, in the above first part of our *Psychology*, in which we have shown what the essence of the soul is, we have gained this much, that henceforth only those will be able to say that the essence of the soul cannot be known, who shall have proved that that essence which we, repeating the doctrines that from generation to generation have come down to us, have pointed out, is not indeed the essence of the soul. And we are confident that these people who grudge the good of the human race, will not, do or say what they may, be able to deprive us of a truth so precious and of such supreme necessity, upon which the apodeictic proof of our immortal life rests. Certainly he who did not know the essence of the soul could never through reason know that it was immortal rather than mortal. We cannot, therefore, consider as unsweet or of little value the fruit of this first part of *Psychology*, in which, from the essence and nature of the soul, we have

drawn irrefragable proofs of its immortal permanency, and consequent eternal destinies.

730. These destinies of the soul will, moreover, be in every case eternal; but it does not follow that they must be happy. A necessity of justice, evident to all, promises a happy lot only to the virtuous soul, and threatens a most unhappy one to the vitious. Now virtue, which perfects the state of the soul, is the work of the soul itself, just as vice, which so utterly ruins and deteriorates it, is due to its own actions. And it is but too evident that the soul which has wasted and disordered itself, cannot attain as happy a condition as the soul that has perfected, dilated, ennobled itself by its own noble and worthy acts. Ethics deals with these acts, distinguishing the good from the bad in accordance with the laws of morality. But, before considering them from the moral point of view, we must consider them in themselves and in the activities which produce them. And this is what we purpose to do in the second part of the *Psychology*, which will treat of the natural development of the human soul, and show how its various powers and manifold operations spring from its essence. Hence this second part will perform for the student a service no less noble than that performed by the first, if it lead him to understand himself in those inner aptitudes and faculties of his own, whose proper use renders most desirable and precious to him the possession of an immortal soul, because they enrich him with virtues, and make certain to him the blessedness of its eternal destinies. Let us, therefore, enter with courage and security upon the research which we have set before us.

PSYCHOLOGY.—VOL. I.

PAGE	LINE	*ERRATA.*	*CORRIGE.*
8	37	the other two cognitions . .	the other cognitions
15	17	compose the world and man is the soul	compose the world is man—is the soul
41	26	the *precept* of it	the *perception* of it
47	23	the mind	the soul
48	20	precept	percept
90	27	May not the fact that the *Ego* is affected by always new feelings, be the cause why the *Ego*, in affirming them, always performs the same operation ?	Does it follow, that because the *Ego* remains affected by always new feelings, it does not, in affirming those feelings, perform always the same kind of operation ? Certainly not.
93	4	unites the felt to the feeling .	unites the felt to the sentient
138	31	unless the things in question are contingent	if the things in question are contingent
139	1	may be distinguished . . .	must be distinguished
147	3	though a second essence . .	though one according to essence
150	18	has *absolute knowledge* . . .	has *absolute notions*
151	26-7	it has a principle	he has a principle
,,	28	it has a term	he has a term
,,	28-9	it sees the animal feeling experienced by it	he sees the animal feeling experienced by him
167	36	cannot help apprehending it .	can only apprehend it
183	17	subjective feelings	subjective-objective feelings
239	8	hence if there remains in them	since, then, there remains in them
,,	9	they at least require . . .	they necessarily require
240	31	being has no unity in itself .	the extended has no unity in itself
241	9	imagining the mind	imagining the soul
252	31	our own experience	our own consciousness
262	19	there take place acts . . .	there take place processes
275	12	since otherwise it would not be a term	since if it were extended it would be a term
284	33	the first spiritual principles .	the first spiritual being
314	10	which feels most may also be that which feels least	which feels the more may also be that which feels the less
,,	32	other	others
344	14	with each simply	with each singly
350	18	though there are other . . .	though there are also
353	31	hence it is that feeling . . .	hence it is that the felt
354	16	can change his own body . .	can cause a change in his own body
358	9	with respect to human nature	with respect to human life itself
361	33	having human nature . . .	belonging to human nature
372	14	the body consists, according .	the body, according
374	21	issuing from the subject itself	by its going beyond itself
377	1	in its entirety	in its entity
,,	25	highest grade of essence . .	highest grade of being
383	9	as a being in body	as *a* being, in (universal) being
392	28	to be transported	to transport themselves
401	25	one and the same being . .	one and the same universal being

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